

TITLE 12. NATURAL RESOURCES
CHAPTER 15. DEPARTMENT OF WATER RESOURCES

(Authority: A.R.S. § 45-101 et seq.)

**ARTICLE 1. DEFINITIONS, FEES, PROCEDURAL RULES
FOR HEARINGS**

Section

- R12-15-101. Reserved through
- R12-15-150. Reserved
- R12-15-151. Fee Schedule
- R12-15-152. Fee Credit Account

ARTICLE 2. PROCEDURAL RULES

Article 2, consisting of Sections R12-15-201 through R12-15-224, adopted effective June 13, 1984.

Section

- R12-15-201. Expired
- R12-15-202. Expired
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Section

- R12-15-401. Licensing Time-frames
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ARTICLE 5. RESERVED

ARTICLE 6. RESERVED

ARTICLE 7. ASSURED AND ADEQUATE WATER SUPPLY

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Section

- R12-15-701. Definitions - Assured and Adequate Water Supply Programs
- R12-15-702. Assured Water Supply Requirement - Application for Certificate of Assured Water Supply; Application for Designation of Assured Water Supply; Application for Analysis of Assured Water Supply
- R12-15-703. Assured Water Supply Requirement - Physical Availability; Continuous Availability; Legal Availability
- R12-15-703.01. Assured Water Supply Requirement - Legal Availability of Central Arizona Project Water or Colorado River Water Leased from an Indian Community
- R12-15-704. Assured Water Supply Requirement - Water Quality
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- R12-15-713. Assured Water Supply Requirement - State Land Department/General Plan, Development Plan, Secondary Plan
- R12-15-714. Assured Water Supply Requirement - Fees
- R12-15-715. Definitions - Adequate Water Supply Program
- R12-15-716. Adequate Water Supply Requirement - Application for Water Report; Application for Designation of Adequate Water Supply; Application for Analysis of Adequate Water Supply
- R12-15-717. Adequate Water Supply Requirement - Physical Availability
- R12-15-718. Adequate Water Supply Requirement - Water Quality
- R12-15-719. Adequate Water Supply Requirement - Ownership Interest
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- R12-15-722. Adequate Water Supply Requirement - Annual Reports
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Article 8, consisting of Sections R12-15-801 through R12-15-821, adopted effective March 5, 1984.

Section

- R12-15-801. Definitions
- R12-15-802. Scope of Article
- R12-15-803. Well drilling and abandonment requirements; licensing and supervision requirements
- R12-15-804. Application for well drilling license
- R12-15-805. Examination for well drilling license
- R12-15-806. License fee; issuance and term of licenses; renewal; display of license
- R12-15-807. Single well license
- R12-15-808. Revocation of license
- R12-15-809. Notice of intention to drill
- R12-15-810. Authorization to drill
- R12-15-811. Minimum well construction requirements
- R12-15-812. Special aquifer conditions
- R12-15-813. Unattended wells
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- R12-15-825. Reserved
- R12-15-826. Reserved
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- R12-15-828. Reserved
- R12-15-829. Reserved
- R12-15-830. Reserved
- R12-15-831. Reserved
- R12-15-832. Reserved
- R12-15-833. Reserved
- R12-15-834. Reserved
- R12-15-835. Reserved
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- R12-15-838. Reserved
- R12-15-839. Reserved
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- R12-15-841. Reserved
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- R12-15-844. Reserved
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- R12-15-846. Reserved
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- R12-15-850. Evaluation of Notices of Intention to Drill; Notification of Registered Site Locations; Vertical Cross-Contamination Evaluation
- R12-15-851. Notification of Well Drilling Commencement
- R12-15-852. Notice of Well Inspection; Opportunity to Comment

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Article 9, consisting of Sections R12-15-901 through R12-15-905, adopted effective December 27, 1982.

Section

- R12-15-901. Definitions
- R12-15-902. Installation of Approved Measuring Devices
- R12-15-903. Approved Water Measuring Devices and Methods
- R12-15-904. Water Measuring Method Reporting Requirements
- R12-15-905. Accuracy of Approved Measuring Devices
- R12-15-906. Repair and Replacement of Approved Measuring Devices
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ARTICLE 10. REPORTING REQUIREMENTS FOR ANNUAL REPORTS, ANNUAL ACCOUNTS, OPERATING FLEXIBILITY ACCOUNTS, AND CONVEYANCES OF GROUNDWATER RIGHTS

Section

- R12-15-1001. Definitions
- R12-15-1002. Form of annual account or annual report
- R12-15-1003. Filing of annual reports/accuracy
- R12-15-1004. Filing of an annual report required by A.R.S. § 45-467 or 45-632 on behalf of the responsible party
- R12-15-1005. Management plan monitoring and reporting requirements
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- R12-15-1007. Reporting requirements for annual account
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- R12-15-1010. Operating flexibility account; tailwater
- R12-15-1011. Statement of operating flexibility account
- R12-15-1012. Rule of construction
- R12-15-1013. Retention of records for annual accounts and annual reports
- R12-15-1014. Late filing or payment; extension and late payment of fees
- R12-15-1015. Reporting requirements for conveyances of grandfathered rights and groundwater withdrawal permits

ARTICLE 11. INSPECTIONS AND AUDITS

Article 11, consisting of Sections R12-15-1101 and R12-15-1102, adopted effective August 31, 1992 (Supp. 92-3).

Section

- R12-15-1101. Inspections
- R12-15-1102. Audits

ARTICLE 12. DAM SAFETY PROCEDURES

Article 12, consisting of Sections R12-15-1201 through R12-15-1206, repealed; new Article 12, consisting of Sections R12-15-1201 through R12-15-1226 et seq., adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

Section

- R12-15-1201. Applicability

Department of Water Resources

R12-15-1202.	Definitions	
R12-15-1203.	Exempt Structures	
Table 1.	Exempt Structures	
R12-15-1204.	Provision for Guidelines	
R12-15-1205.	General Responsibilities	
R12-15-1206.	Classification of Dams	
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Table 2.	Size Classification	
Table 3.	Downstream Hazard Potential Classification	
R12-15-1207.	Application Process	
R12-15-1208.	Application to Construct, Reconstruct, Repair, Enlarge, or Alter a High or Significant Hazard Potential Dam	
R12-15-1209.	Application to Breach or Remove a High or Significant Hazard Potential Dam	
R12-15-1210.	Application to Construct, Reconstruct, Repair, Enlarge, Alter, Breach, or Remove a Low Hazard Potential Dam	
R12-15-1211.	Application to Construct, Reconstruct, Repair, Enlarge, Alter, Breach, or Remove a Very Low Hazard Potential Dam	
R12-15-1212.	Construction of a High, Significant, or Low Hazard Potential Dam	
R12-15-1213.	Completion Documents for a Significant or High Hazard Potential Dam	
R12-15-1214.	Licensing	
R12-15-1215.	Construction Drawings, Construction Specifications, and Engineering Design Report for a High, Significant, or Low Hazard Potential Dam	
R12-15-1216.	Design of a High, Significant, or Low Hazard Potential Dam	
Table 4.	Inflow Design Flood	
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R12-15-1217.	Maintenance and Repair; Emergency Actions	
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R12-15-1220.	Existing Dams	
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R12-15-1222.	Right of Review	
R12-15-1223.	Enforcement Authority	
R12-15-1224.	Emergency Procedures	
R12-15-1225.	Emergency Repairs	
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ARTICLE 1. DEFINITIONS, FEES, PROCEDURAL RULES FOR HEARINGS

R12-15-101. Reserved through

R12-15-150. Reserved

R12-15-151. Fee Schedule

- A.** The Department shall only accept or take action on an application or filing upon payment of the appropriate fee as listed below. Payment may be made by cash, check, or by entry in an existing Department fee-credit account established pursuant to R12-15-152.
- B.** The following fees shall be paid:
- | | | |
|-----|---|-----------------|
| 1. | SURFACE WATER | FEE (\$) |
| a. | Application for permit to appropriate | |
| i. | Less than 50 acre feet | 50.00 |
| ii. | 50 acre feet or more | 75.00 |
| b. | Permit to appropriate | |
| i. | Less than 50 acre feet | 25.00 |
| ii. | 50 acre feet or more | 50.00 |
| c. | Claim of water right for a stockpond and application for certification. | 10.00 |
| d. | Certificate of water right for stockpond | 30.00 |

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|------|---|--------|
| e. | Issue certificate of water right (except stockpond) | 50.00 |
| f. | Application for severance and transfer of water right. | 500.00 |
| g. | Application to transport water out of state | 500.00 |
| h. | Assignment | |
| i. | Assignment of application for permit to appropriate, statement of claim, or claim of water right for a stockpond. | 10.00 |
| ii. | Assignment and reissuance of permit to appropriate | 20.00 |
| iii. | Assignment and reissuance of certificate of water right (except stockpond) | 35.00 |
| iv. | Assignment and reissuance of certificate of water right for a stockpond. | 20.00 |
- 2. GROUNDWATER**

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|----|--|--------|
| a. | Application for groundwater withdrawal permit, modifications and renewals (except applications for hydrologic testing and temporary dewatering permits). | 150.00 |
| b. | Application for permit for hydrologic testing and temporary dewatering, modifications, and renewals | 50.00 |
| c. | Groundwater withdrawal permit. | 50.00 |
| d. | Convey groundwater withdrawal permit (except for permits for temporary electrical energy generation, temporary dewatering, hydrologic testing, and groundwater replenishment district withdrawals) | 35.00 |
| e. | Application for notice of authority to irrigate in an irrigation nonexpansion area | 50.00 |
| f. | Convey or reissue notice of authority to irrigate in an irrigation nonexpansion area | 35.00 |

3. WATER EXCHANGES

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|----|--|--------|
| a. | Statement of water exchange contract | 100.00 |
| b. | Application for water exchange permit | 150.00 |
| c. | Water exchange permit | 100.00 |
| d. | Renew or modify water exchange permit. | 100.00 |
| e. | Notice of water exchange | 150.00 |

4. WELLS

- | | | |
|----|---|---|
| a. | Notice of intent to drill and issue drilling card | 10.00 |
| b. | Application for permit to drill new or replacement well and issue drilling card | 50.00 |
| c. | Reissue drilling card | 10.00 |
| d. | Permit to drill new or replacement well | 30.00 |
| e. | Registration of exempt well | No charge |
| f. | Registration of nonexempt well | 10.00 |
| g. | Late registration of any well (post 7/16/82) | 10.00 |
| h. | Well assignments (single or group of wells by same owner) | 10.00 |
| i. | Well driller's licenses (except single well license) | 50.00 |
| j. | Reissue or renew unexpired well driller's license | 10.00 |
| k. | Reactivate expired well driller's license | 20.00 |
| l. | Single well license | No charge |
| m. | Well capping | 300.00 minimum plus actual expenses over 300.00 |

5. GRANDFATHERED RIGHTS

- | | | |
|----|--|-------|
| a. | Application for certificate of grandfathered right | 75.00 |
|----|--|-------|

- b. Late application for certificate of grandfathered right100.00
- c. Convey or reissue certificate of grandfathered right35.00
- d. Application for type 1 nonirrigation grandfathered right associated with retired irrigation 1 and50.00
- e. Application to retire an irrigation grandfathered right from irrigation to nonirrigation100.00
- f. Application for restoration of retired irrigation grandfathered right50.00
- g. Purchase of flexibility account credit balance100.00
- 6. SUBSTITUTION OF ACRES
 - a. Application to substitute irregularly shaped acres in an irrigation nonexpansion area or an active management area50.00
 - b. Application to substitute flood-damaged acres in an irrigation nonexpansion area or an active management area100.00
 - c. Application to substitute CAP acres in an irrigation nonexpansion area50.00
 - d. Application to substitute, or to reverse substitution of, CAP acres in an active management area100.00
- 7. ADEQUATE AND ASSURED WATER SUPPLY
 - a. Application for certificate of assured water supply or report of adequate water supply50.00
 - b. Review of study and plans as a function of development size:
 - i. First 20 lots 0
 - ii. Next 80 lots \$1.00/lot
 - iii. Next 900 lots50/lot
 - iv. Next 9,000 lots25/lot
 - v. Over 10,000 lots10/lot
 - c. Certificate of assured water supply50.00
- 8. UNDERWATER WATER STORAGE SAVINGS AND REPLENISHMENT PROGRAM
 - a. Application for underground storage facility permit750.00
 - b. Underground storage facility permit500.00
 - c. Convey underground storage facility permit .300.00
 - d. Application for groundwater savings facility permit500.00
 - e. Groundwater savings facility permit350.00
 - f. Convey groundwater savings facility permit300.00
 - g. Application for water storage permit250.00
 - h. Water storage permit100.00
 - i. Convey water storage permit300.00
 - j. Application for recovery well permit
 - i. First 10 wells 50/well
 - ii. Over 10 wells 10/well
 - k. Recovery well permit
 - i. First 10 wells 50/well
 - ii. Over 10 wells 10/well
- 9. CERTIFICATES OF GROUNDWATER OVERSUPPLY
 - a. Application for certificate of groundwater oversupply150.00
 - b. Certificate of groundwater oversupply50.00
- 10. LAKES
 - a. Application for permit to fill or refill a body of water
 - i. Poor quality groundwater150.00
 - ii. Interim50.00
 - b. Permit to fill or refill a body of water
 - i. Poor quality groundwater75.00
 - ii. Interim30.00
 - c. Application for determination of substantial capital investment to fill or refill a body of water50.00
 - d. Application and permit for temporary emergency use of water to fill a body of water50.00
- 11. SAFETY OF DAMS
 - a. Application for review No charge
 - b. Application filing fee - review of plans and studies based upon dam cost
 - i. First \$100,000 2.0%
 - ii. Next \$400,000 1.5%
 - iii. Next \$500,000 1.0%
 - iv. Remainder over \$1,000,0005%
 - c. Safety Inspections
 - i. Per inspection100.00
 - ii. Plus, per foot of height2.00
- 12. WEATHER MODIFICATION
 - a. Application for weather modification license100.00
 - b. License to manufacture or sell weather modification equipment10.00
- 13. COPIES
 - a. Photocopies25/page
 - b. Microfiche copies30/page
 - c. Computer reports:
 - i. First page of report15.00
 - ii. Additional page25 each
 - d. Certified copies 2.75/page
- C. In addition to the fees listed above, the applicant shall pay the Department the actual cost of mailing and/or publishing any legal notice required by statute.

Historical Note

Adopted effective October 8, 1982 (Supp. 82-5).

Amended effective June 29, 1994 (Supp. 94-2). Amended effective March 3, 1995 (Supp. 95-1).

R12-15-152. Fee credit account

Any person who may pay more than two hundred dollars in fees annually may apply to the Department to have a fee credit account established for periodic billing. The Department retains discretion to refuse to establish a credit account and shall set reasonable terms for payment and interest for any credit account established pursuant to this rule. Any person who has established a credit account for fees with the Department who does not comply with the terms of the account shall lose the privilege of maintaining such an account.

Historical Note

Adopted effective October 8, 1982 (Supp. 82-5).

ARTICLE 2. PROCEDURAL RULES**R12-15-201. Expired****Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). The reference to R12-14-223 in subsection (C) corrected to read R12-15-223 (Supp. 93-1). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-202. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-203. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-204. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-205. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-206. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-207. Correction of Clerical Mistakes

Upon a motion or on the initiative of the Director or the hearing officer, the Director or the hearing officer may correct clerical mistakes in decisions, orders, rulings, any process issued by the Department or other parts of the record, and errors in the record arising from oversight or omission. The Director or the hearing officer shall give all parties and the Chief Counsel notice of any corrections made pursuant to this rule.

Historical Note

Adopted effective June 13, 1984 (Supp. 84-3).

R12-15-208. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-209. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-210. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-211. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-212. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-213. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-214. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-215. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section number corrected (Supp. 93-1). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-216. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-217. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-218. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-219. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R14-15-220. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R14-15-221. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-222. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-223. Expired**Historical Note**

Adopted effective June 13, 1984 (Supp. 84-3). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2159, effective February 28, 2001 (Supp. 01-2).

R12-15-224. Ex Parte Communications

- A.** During the course of a contested matter, a party shall not make an ex parte communication or knowingly cause an ex parte communication to be made to the Director, a hearing officer, or other Department employee or consultant who is or may reasonably be expected to be involved in the decision-making process of the contested matter.
- B.** During the course of a contested matter, the Department personnel listed in subsection (A) shall not make an ex parte communication or knowingly cause an ex parte communication to be made to a party or a person who will be materially and directly affected by the outcome of the contested matter.
- C.** Any of the Department personnel listed in subsection (A) of this rule who receives a written communication prohibited by this rule shall file a copy of the communication in the public docket and serve a copy on the Director or the hearing officer, the Chief Counsel and all parties to the contested matter. Any of the Department personnel listed in subsection (A) of this rule who receives an oral communication prohibited by this rule shall file a summary of the communication in the public docket and serve a copy on the Director or the hearing officer, the Chief Counsel and all parties to the contested matter.
- D.** Upon receipt of an ex parte communication or a copy or summary of an ex parte communication made or knowingly caused to be made by a party in violation of this rule, the Director or the hearing officer, to the extent consistent with the interests of justice and the policy of the underlying states and rules, may require the party to show cause why his claim or interest in the contested matter should not be dismissed, denied or disregarded on account of such violation.
- E.** For purposes of this rule, "ex parte communication" means any written or oral communication relating to the merits of a contested matter, except:
 - 1. Communications made in the course of official proceedings in the contested matter;
 - 2. Communications made in writing, if a copy of the communication is promptly served on the Director or the hearing officer, the Chief Counsel and all parties to the contested matter;
 - 3. Oral communications made after adequate notice to all parties and the Chief Counsel;
 - 4. Communications relating solely to procedural matters; and
 - 5. As otherwise authorized by law.

Historical Note

Adopted effective June, 1984 (Supp. 84-3).

ARTICLE 3. STOCKPOND AND OTHER SURFACE WATER RULES**R12-15-301. Expired****Historical Note**

Adopted effective October 8, 1982 (Supp. 82-5).
Amended effective April 3, 1987 (Supp. 87-2). Amended effective May 7, 1990 (Supp. 90-2). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2012, effective February 28, 2001 (Supp. 01-2).

R12-15-302. Expired**Historical Note**

Adopted effective October 8, 1982 (Supp. 82-5).
Amended effective May 7, 1990 (Supp. 90-2). Section expired under A.R.S. § 41-1056(E) at 7 A.A.R. 2012, effective February 28, 2001 (Supp. 01-2).

R12-15-303. Multiple applications for water rights

- A.** If two or more applications are filed with the Director pursuant to A.R.S. §§ 45-152 or 45-273 or both by or for the same applicant and for a right to use the same water, the Director shall consolidate the applications. If the applicant is otherwise entitled to both a permit to appropriate and a certificate of stockpond water right, the Director shall issue to the applicant either the permit to appropriate or the certificate of stockpond water right, whichever would give the applicant the higher priority.
- B.** If one or more applications are filed with the Director pursuant to A.R.S. §§ 45-152 or 45-273 or both by or for the same applicant and for a right to use the same water for which the applicant holds a permit to appropriate, a certificate of water right or a certificate of stockpond water right, the Director shall deny the application or applications unless the applicant relinquishes every permit to appropriate, certificate of water right and certificate of stockpond water right which the applicant holds for that same water. The applicant may relinquish every permit to appropriate, certificate of water right and certificate of stockpond water right on the condition that the Director issues a permit to appropriate or certificate of stockpond water right to the applicant for the same water. In that case, the relinquishment shall be effective when the Director issues the permit to appropriate or certificate of stockpond water right.
- C.** For purposes of this rule, "same water" means the same quantity of water from the same source for use at the same place for the same purpose. Water for which a right is applied or held pursuant to an application or permit to appropriate, certificate of water right or certificate of stockpond water right may be the same water in whole or in part as water for which a right is applied or held pursuant to a separate application or permit to appropriate, certificate of water right or certificate of stockpond water right.

Historical Note

Adopted effective April 3, 1987 (Supp. 87-2). Section R12-15-310 renumbered to R12-15-303 and amended effective May 7, 1990 (Supp. 90-2).

R12-15-304. Reserved**R12-15-305. Reserved****R12-15-306. Reserved****R12-15-307. Reserved****R12-15-308. Reserved****R12-15-309. Reserved****R12-15-310. Renumbered****Historical Note**

Adopted effective April 3, 1987 (Supp. 87-2). Section R12-15-310 renumbered to R12-15-303 effective May 7, 1990 (Supp. 90-2)

ARTICLE 4. LICENSING TIME-FRAMES**R12-15-401. Licensing Time-frames**

The following time-frames apply to licenses issued by the Department. In this Article, "license" has the meaning prescribed in A.R.S. § 41-1001(11). The licensing time-frames consist of an administrative completeness review time-frame, a substantive review time-frame, and an overall time-frame.

- 1. Within the administrative completeness review time-frames set forth in subsection (7), the Department shall notify the applicant in writing whether the application is complete or incomplete. If the application is incomplete,

- the notice shall specify what information or component is required to make the application complete.
2. An applicant with an incomplete application shall supply the missing information within 60 days from the date of the notice, or within such further time as the Director may specify, unless another time limit is specified by statute or applicable rule. If the applicant fails to complete the application within the specified time period, the Department may deem the application withdrawn and close the file. Closing a file under this provision does not preclude the applicant from filing a new application.
 3. Within the overall time-frames set forth in subsection (7), unless extended by mutual agreement under A.R.S. § 41-1075, the Department shall notify the applicant in writing that the application is granted or denied. If the application is denied, the Department shall provide written justification for the denial and a written explanation of the applicant's right to a hearing or the applicant's right to appeal.
 4. In computing any period of time prescribed by this rule, the day of the filing, notice or event from which the designated period of time begins to run shall not be included. The last day of the computed period shall be included,

unless it is a Saturday, Sunday, or a legal holiday, in which event the period runs until the end of the next day which is not a Saturday, Sunday, or legal holiday. When the prescribed administrative completeness review time-frame or substantive review time-frame is less than 11 days, intermediate Saturdays, Sundays and legal holidays shall be excluded from the computation. The overall time-frame is the sum of the administrative completeness review time-frame and the substantive review time-frame calculated as prescribed by this Section.

5. Except as otherwise noted, the licensing time-frames do not include time for hearings. Time-frames in cases where a hearing is held are increased by 120 days.
6. The licensing time-frame rules are effective after December 31, 1998, as prescribed by A.R.S. § 41-1073(A), and apply to all applications filed after that date.
7. The licensing time-frames are set forth in Table A.

Historical Note

Adopted effective December 31, 1998; filed with the Office of the Secretary of State July 28, 1998 (Supp. 98-3).

Table A. Licensing Time-frames

No.	License	Legal Authority	Completeness Review (Days)*	Substantive Review (Days)*	Overall Time-frame (Days)*
1	Filling a body of water with poor quality water	A.R.S. § 45-132(C)	30	60	90
2	Interim water use in body of water	A.R.S. § 45-133	30	60	90
3	Temporary emergency permit for use of surface water or groundwater in body of water	A.R.S. § 45-134	10	20	30
4	Permit to appropriate water (non-instream flow)	A.R.S. §§ 45-151 and 45-153	30	420	450
5	Permit to appropriate water (instream flow)	A.R.S. §§ 45-151 and 45-153	50	530	580
6	Change in use of water	A.R.S. § 45-156(B)	30	375	405
7	Exception to limitation on time of completion of construction	A.R.S. § 45-160	5	15	20
8	Primary reservoir permit	A.R.S. § 45-161	30	420	450
9	Secondary reservoir permit	A.R.S. § 45-161	30	420	450
10	Certificate of water right (non-instream flow)	A.R.S. § 45-162	20	100	120
11	Certificate of water right (instream flow)	A.R.S. § 45-162	20	190	210
12	Reissuance of permit or certificate held by the United States or State of Arizona	A.R.S. § 45-164(C)	10	80	90
13	Severance and transfer	A.R.S. § 45-172 (excluding 172.6)	30	390	420
14	Stockpond certificate	A.R.S. § 45-273	30	190	220
15	Transporting water from this state **	A.R.S. § 45-292	120	300	420

No.	License	Legal Authority	Completeness Review (Days)*	Substantive Review (Days)*	Overall Time-frame (Days)*
16	Waiver of water conserving plumbing fixture requirement	A.R.S. § 45-315	10	3	13
17	Irrigated acreage in an irrigation non-expansion area	A.R.S. § 45-437	30	90	120
18	Substitution of acres in an irrigation non-expansion area/ flood damage	A.R.S. § 45-437.02	30	90	120
19	Substitution of acres in an irrigation non-expansion area/ impediments to efficient irrigation	A.R.S. § 45-437.03	30	90	120
20	Reversal of substitution of acres irrigated with Central Arizona Project water	A.R.S. § 45-452(G)	30	90	120
21	Type 1 non-irrigation grandfathered right associated with irrigation land retired 1965-1980	A.R.S. §§ 45-463, 45-476.01, and 45-476	30	90	120
22	Type 2 non-irrigation grandfathered right	A.R.S. §§ 45-464, 45-476.01, and 45-476	30	90	120
23	Irrigation grandfathered right	A.R.S. §§ 45-465, 45-476.01, and 45-476	30	90	120
24	Substitution of acres in an active management area/flood damaged acres	A.R.S. § 45-465.01	30	90	120
25	Substitution of acres in an active management area/ impediments to efficient irrigation	A.R.S. § 45-465.02	30	90	120
26	Type 1 non-irrigation right retired after 6/12/80	A.R.S. § 45-469	30	90	120
27	Restoration of retired irrigation grandfathered right	A.R.S. § 45-469(O)	30	90	120
28	Revised certificate for new or additional points of withdrawal for a Type 2 right	A.R.S. § 45-471(C)	45	135	180
29	Conveyance of irrigation grandfathered right for electrical energy generation	A.R.S. § 45-472(B)(2)	30	90	120
30	Conveyance of irrigation grandfathered right for non-irrigation use within service area	A.R.S. § 45-472(C)	30	90	120
31	Contract to supply groundwater	A.R.S. § 45-492(C)	15	90	105
32	Extension of service area to provide disproportionately large amount of water to large user	A.R.S. § 45-493(A)(2)	15	90	105

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No.	License	Legal Authority	Completeness Review (Days)*	Substantive Review (Days)*	Overall Time-frame (Days)*
33	Addition/exclusion of acres by irrigation district	A.R.S. § 45-494.01(A)	30	90	120
34	Delivery of groundwater from an irrigation district to a general industrial use permit holder	A.R.S. § 45-497(B)	15	60	75
35	Issuance/renewal/modification of dewatering permit	A.R.S. §§ 45-513 and 45-527	30	70	100
36	Issuance/renewal/modification of mineral extraction and metallurgical processing permit	A.R.S. §§ 45-514 and 45-527	30	70	100
37	Issuance/renewal/modification of general industrial use permit	A.R.S. §§ 45-515, 45-521, 45-522, 45-523, 45-524, and 45-527	30	70	100
38	Issuance/renewal/modification of poor quality groundwater withdrawal permit	A.R.S. §§ 45-516 and 45-527	30	70	100
39	Issuance/renewal/modification of temporary permit for electrical energy generation	A.R.S. §§ 45-517 and 45-527	30	70	100
40	Issuance/extension/modification of temporary dewatering permit	A.R.S. §§ 45-518 and 45-527	30	70	100
41	Emergency temporary dewatering permit	A.R.S. § 45-518(D)	3	7	10
42	Issuance/renewal/modification of drainage water withdrawal permit	A.R.S. §§ 45-519 and 45-527	30	70	100
43	Issuance/renewal/modification of hydrologic testing permit	A.R.S. §§ 45-519.01, 45-521, 45-522, 45-524, and 45-527	30	30	60
44	Change of location of use	A.R.S. §§ 45-520(A), 45-521, and 45-527	30	30	60
45	Conveyance of a groundwater withdrawal permit	A.R.S. § 45-520(B)	30	30	60
46	Transportation of groundwater withdrawn in McMullen Valley Basin to an active management area	A.R.S. § 45-552(B)	45	105	150
47	Transportation of groundwater withdrawn in Harquahala irrigation non-expansion area to an initial active management area	A.R.S. § 45-554(B)	45	105	150
48	Transportation of groundwater withdrawn in Big Chino subbasin to an initial active management area	A.R.S. § 45-555(B)	45	105	150

No.	License	Legal Authority	Completeness Review (Days)*	Substantive Review (Days)*	Overall Time-frame (Days)*
49	Well spacing requirements for withdrawing groundwater for transportation to an active management area	A.R.S. § 45-559	45	105	150
50	Groundwater replenishment district's preliminary or long-term replenishment plan **	A.R.S. § 45-576.03	As prescribed by A.R.S. § 45-576.03(A)	As prescribed by A.R.S. § 45-576.03 (B), (C), (D), and (E)	As prescribed by A.R.S. § 45-576.03
51	Conservation district or water district long-term replenishment plan **	A.R.S. §§ 45-576.03, 45-576.02(C), and 45-576.02(E)	As prescribed by A.R.S. § 45-576.03(I)	As prescribed by A.R.S. § 45-576.03(J), (K), (L), and (M)	As prescribed by A.R.S. § 45-576.03
52	Notice of intent to abandon a well	A.R.S. § 45-594 and A.A.C. R12-15-816	15	15	30
53	Well construction request for variance	A.R.S. §§ 45-594, 45-596(D), and A.A.C. R12-15-820	15	35	50
54	Well driller license	A.R.S. § 45-595(C)	25	105	130
55	Single well license	A.R.S. § 45-595(D)	25	105	130
56	Renewal or reactivation of well drilling license	A.R.S. § 45-595(C) A.A.C. R12-15-806	25	15	40
57	Notice of intent to drill	A.R.S. § 45-596, and A.A.C. R12-15-810	15	0	15
58	Well construction permit	A.R.S. § 45-599	30	60	90
59	Alternative water measuring devices	A.R.S. § 45-604 and A.A.C. R12-15-909	15	60	75
60	Underground storage facility permit	A.R.S. §§ 45-811.01 and 45-871.01	As prescribed by A.R.S. § 45-871.01(B)	As prescribed by A.R.S. § 45-871.01(D), (G), and (H)	As prescribed by A.R.S. § 45-871.01
61	Groundwater savings facility permit	A.R.S. §§ 45-812.01 and 45-871.01	As prescribed by A.R.S. § 45-871.01(B)	As prescribed by A.R.S. § 45-871.01(D), (G), and (H)	As prescribed by A.R.S. § 45-871.01
62	Storage facility permit renewal/conveyance/modification	A.R.S. §§ 45-814.01 and 45-871.01	As prescribed by A.R.S. § 45-871.01(B)	As prescribed by A.R.S. § 45-871.01(D), (G), and (H)	As prescribed by A.R.S. § 45-871.01
63	Water storage permit modification/conveyance	A.R.S. §§ 45-831.01 and 45-871.01	As prescribed by A.R.S. §§ 45-831.01(G) and 45-871.01(B) and (E)	As prescribed by A.R.S. §§ 45-831.01(G) and 45-871.01(D), (E), (G), and (H)	As prescribed by A.R.S. §§ 45-831.01(G) and 45-871.01
64	Recovery well permit	A.R.S. §§ 45-834.01 and 45-871.01	As prescribed by A.R.S. § 45-871.01(B)	As prescribed by A.R.S. § 45-871.01(F), (G), and (H)	As prescribed by A.R.S. § 45-871.01
65	Emergency temporary recovery well permit	A.R.S. § 45-834.01(D)	5	10	15
66	Issuance/renewal/modification of water exchange permit	A.R.S. §§ 45-1041, 45-1042, and 45-1045	As prescribed by A.R.S. § 45-1042(A)	As prescribed by A.R.S. § 45-1042(B), (C), and (D)	As prescribed by A.R.S. § 45-1042
67	Modification of previously enrolled or permitted water exchange/non-Colorado River	A.R.S. § 45-1041(B)	60	90	150

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No.	License	Legal Authority	Completeness Review (Days)*	Substantive Review (Days)*	Overall Time-frame (Days)*
68	Construction, enlargement, repair, alteration, or removal of a dam	A.R.S. §§ 45-1203, 45-1206, and 45-1207	120	60	180
69	Weather modification license	A.R.S. § 45-1601	15	60	75
70	Certificate of Assured Water Supply	A.A.C. R12-15-702, A.R.S. §§ 45-576 and 45-578	150	60	210
71	Designation or Modification of Designation of Assured Water Supply	A.A.C. R12-15-702 and R12-15-714; A.R.S. § 45-576	150	60	210
72	Analysis of Assured Water Supply/unplatted development plan	A.A.C. R12-15-712, A.R.S. § 45-576(H)	150	30	180
73	Assured Water Supply for State lands	A.A.C. R12-15-713, A.R.S. § 37-334(F)	30	60	90
74	Water adequacy report	A.A.C. R12-15-716, A.R.S. § 45-108	60	60	120
75	Designation or Modification of Designation of Adequate Water Supply	A.A.C. R12-15-716, A.A.C. R12-15-725 A.R.S. § 45-108	150	60	210
76	Analysis of water adequacy/unplatted	A.R.S. § 45-108 A.A.C. R12-15-723	60	60	120
77	Adequate Water Supply for State lands	A.R.S. § 45-108 A.A.C. R12-15-724	30	60	90

* The computation of days is prescribed by subsection (4).

** Hearing is required.

Historical Note

Adopted effective December 31, 1998; filed with the Office of the Secretary of State July 28, 1998 (Supp. 98-3).

ARTICLE 5. RESERVED**ARTICLE 6. RESERVED****ARTICLE 7. ASSURED AND ADEQUATE WATER SUPPLY****R12-15-701. Definitions - Assured and Adequate Water Supply Programs**

In addition to the definitions set forth in A.R.S. §§ 32-2101, 45-101, 45-402, 45-561, 45-576, 45-651, 45-802, 45-851, and 45-1901, the following words and phrases in this Article shall have the following meanings, unless the context otherwise requires:

1. "AAWS applicant" means an applicant for an analysis of assured water supply, or the applicant's proposed municipal provider.
2. "Active management area water district" means a district formed pursuant to A.R.S. Title 48, Chapter 28.
3. "Analysis of assured water supply" means an instrument prepared by the director in accordance with R12-15-712.
4. "Build-out" means a condition in which all water delivery mains are in place and active water service connections exist for all lots.
5. "Central Arizona Project water" means:
 - a. All water from the Colorado River or from the Central Arizona Project works authorized in P.L. 90-537, excluding enlarged Roosevelt reservoir, which

is made available pursuant to a subcontract with a multi-county water conservation district.

- b. Any additional water not included in subsection (5)(a) that is delivered by the United States Secretary of the Interior pursuant to an Indian water rights settlement through the Central Arizona Project.
6. "Certificate applicant" means a person who is applying for a certificate of assured water supply, or the applicant's proposed municipal provider.
7. "Certificate of assured water supply" means a permit issued by the director for a development, other than a master-planned community, after the director determines that an assured water supply exists for the development pursuant to A.R.S. § 45-576 and this Article.
8. "Certificate of convenience and necessity" means a certificate required by the Arizona Corporation Commission pursuant to A.R.S. § 40-281 which allows a private water company to serve water to customers within its certificated area.
9. "Colorado River water" means any surface water diverted from the main stem of the Colorado River, except Central Arizona Project water, which is obtained through a contract with the United States Secretary of the Interior.
10. "Committed demand" means the estimated demand of all recorded lots within the boundaries of the area being

- evaluated for physical availability which are not yet served water.
11. "County water augmentation authority" means an authority formed pursuant to A.R.S. Title 45, Chapter 11, Arizona Revised Statutes.
 12. "Date of application" means the date the director receives an application for a certificate of assured water supply, designation of assured water supply, or an analysis of assured water supply.
 13. "Declaration date" means the date the director enters a final decision and order declaring that the Prescott Active Management Area is no longer at safe-yield.
 14. "Declaration year" means the calendar year in which the director enters a final decision and order declaring that the Prescott Active Management Area is no longer at safe-yield.
 15. "Deemed provider" means a city or town designated under A.R.S. § 45-576(E) which has received an allocation from the United States Secretary of the Interior for Central Arizona Project water.
 16. "Depth-to-static water level" means the level at which water stands in a well when no water is withdrawn by pumping or by free flow.
 17. "Designated provider" means within an active management area, a municipal provider which has obtained a designation of assured water supply or a city or town which is a deemed provider.
 18. "Designation of AWS applicant" means a person applying for a designation of assured water supply.
 19. "Designation of assured water supply" means a decision and order issued by the director designating a municipal provider as having an assured water supply pursuant to A.R.S. § 45-576 and this Article.
 20. "Development" means either a subdivision or an unplatted development plan.
 21. "Drought response plan" means a plan describing a variety of conservation and augmentation measures, especially the use of backup water supplies, which a municipal provider will utilize in operating its water supply system in times of a water supply shortage. The plan may include the following:
 - a. An identification of priority water uses consistent with appropriate public policies.
 - b. A description of sources of emergency water supplies.
 - c. An analysis of the potential use of water pressure reduction.
 - d. Plans for public education and voluntary water use reduction.
 - e. Plans for water use bans, restrictions and rationing.
 - f. Plans for water pricing and penalties for excess water use.
 - g. Plans for coordination with other cities, towns, and private water companies.
 22. "Drought volume" means 80% of the volume of a surface water supply determined by the director under R12-15-703 to be physically available on an annual basis to a holder of a certificate of assured water supply or a designation of assured water supply.
 23. "Dry-lot development" means a development without a central system for the distribution of water.
 24. "Existing municipal provider" means a municipal provider that was in operation and serving water for non-irrigation use on or before January 1, 1990.
 25. "Extinguish" means to cause a grandfathered groundwater right to cease to exist through a process established by the director pursuant to R12-15-705.
 26. "Firm yield" means the minimum annual diversion for the period of record which may include runoff and releases from storage reservoirs.
 27. "Groundwater replenishment district" means a district established pursuant to A.R.S. Title 48, Chapter 27.
 28. "Lost and unaccounted for water" means water which is defined as lost and unaccounted for water in the management plans for the second management period, 1990-2000.
 29. "Management plan" means a water management plan adopted by the director pursuant to A.R.S. §§ 45-561 et seq.
 30. "Median flow" means the flow which is represented by the middle value of a set of flow data which are ranked in order of magnitude.
 31. "Multi-county water conservation district" means a district established pursuant to A.R.S. Title 48, Chapter 22.
 32. "Municipal provider" means a city, town, or private water company.
 33. "Multifamily housing unit" means a mobile home in a mobile home park and any permanent housing unit having one or more common walls with another housing unit located in a multifamily residential structure and includes a unit in a duplex, triplex, fourplex, condominium development, townhome development, or apartment complex.
 34. "New municipal provider" means a municipal provider that began serving water for non-irrigation use after January 1, 1990.
 35. "New large cooling user" means a user which is defined as a new large cooling user in the management plans for the second management period, 1990-2000.
 36. "Non-residential use" means a water use which is defined as a non-residential use in the management plans for the second management period, 1990-2000.
 37. "Owner" means:
 - a. With respect to a certificate applicant, a person who holds a sufficient ownership interest in the land described in the certificate application to allow for the sale or lease of the property immediately upon approval of the certificate and plat, and the issuance of the public report;
 - b. With respect to a designation applicant, the person who will be providing water service pursuant to the designation.
 38. "Perennial" means a stream that flows continuously.
 39. "Persons per household" means a measure obtained by dividing the number of persons residing in housing units by the number of housing units.
 40. "Physical availability demonstration" means a process whereby a municipal provider not presently applying for a designation of assured water supply or a developer not presently applying for a certificate of assured water supply can submit evidence to the director indicating the physical availability as determined under R12-15-703(B) and quality of water sources under R12-15-704 identified by the provider or developer.
 41. "Plat" means a preliminary or final map of lots and land uses which requires evidence of an assured water supply prior to approval by a city, town, or county.
 42. "Preliminary certificate of assured water supply" means an instrument issued by the director upon a finding that an applicant for a certificate of assured water supply has

satisfied all assured water supply requirements in this Article except for those established in R12-15-707.

43. "Service area population" means the population defined as service area population in the management plans for the second management period, 1990-2000.
44. "Single family housing unit" means a detached dwelling, including mobile homes not in mobile home parks.
45. "Stored credits" means incidental recharge credits, extinguishment credits, and groundwater storage project credits which the director has included in the physical availability account established under R12-15-703.
46. "Superfund site" means the site of a remedial action undertaken pursuant to the Comprehensive Response, Compensation, and Liability Act of 1980, as amended (P.L. 96-510; 94 Stat. 2767; 42 U.S.C. §§ 9601-9657).
47. "Surface water" means any surface water, including Central Arizona Project water and Colorado River water.
48. "Turf-related Facility" means a facility which is defined as a turf-related facility in the management plans for the second management period, 1990-2000.
49. "Unplatted development plan" means an unplatted land-use plan for development which, if platted, would be subject to the requirements of this Article.
50. "Water supply plan" means a water supply plan containing all of the following information:
 - a. A description of facilities and water-using features associated with the residential and non-residential portion of the development.
 - b. A description of the applicant's current and proposed water conservation programs.
 - c. A list of current and proposed conservation-oriented ordinances adopted or under consideration by the local governing body.
 - d. A description of conservation practices, rates, fees, restrictions, policies, and devices to be utilized within the development, or utilized within the municipal provider's service area to meet the applicant's or the applicant's municipal provider's conservation requirements established in the management plan in effect on the date of application.
 - e. Plans for augmentation of the water supplies, including the development or acquisition of renewable supplies.
51. "Water Quality Assurance Revolving Fund site" means a site of a remedial action undertaken pursuant to A.R.S. Title 49, Chapter 2, Article 5.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-702. Assured Water Supply Requirement - Application for Certificate of Assured Water Supply; Application for Designation of Assured Water Supply; Application for Analysis of Assured Water Supply

- A. A person applying for a certificate of assured water supply, a designation of assured water supply, or an analysis of assured water supply shall provide the following information on a form prescribed by the director:
 1. For an application for a certificate of assured water supply or an analysis of assured water supply:
 - a. Name, telephone number, and address of the certificate applicant or AAWS applicant. The applicant must be the owner of the subdivision for which the application is filed. If the holder of an ownership interest in the proposed development is a person other than an individual, such as a corporation, part-

nership, or trust, a statement naming the type of legal entity and listing the interest and extent of such interest of each principal in the entity. For purposes of this subsection (a), "principal" means any person or entity having a ten percent or more financial interest in the development or, if the legal entity is a trust, each beneficiary of the trust holding a ten percent or more beneficial interest in the development.

- b. Name of the proposed development.
- c. Name, address, and telephone number of the municipal provider proposed to serve the development and the applicant's technical consultant.
- d. Number of lots and housing units projected to be located within the proposed development.
- e. A copy of the proposed development's plat which will be submitted to the city, town, or county for approval or unplatted development plan and a map of the proposed development which indicates the location of the proposed water distribution system and treatment works and the proposed development's geographical coordinates.
- f. Total acreage of and size of lots in the proposed development.
- g. The anticipated schedule for the proposed development to reach build-out and an annual projection of water demand until build-out.
- h. Proposed water uses of the proposed development.
- i. Projected annual water demand per lot or housing unit within the proposed development at build-out for the following categories, and a schedule for completion of facilities associated with each category:
 - i. Single family housing units;
 - ii. Multifamily housing units;
 - iii. Non-residential uses, excluding turf-related facilities and new large cooling users;
 - iv. Turf-related facilities;
 - v. New large cooling users; and
 - vi. Other uses which impact the projected annual water demand.
- j. A water supply plan.
- k. Information required to project annual lost and unaccounted for water associated with the proposed development.
- l. A description of the landscaping to be planted in public rights-of-way associated with the proposed development.
- m. Projected average number of persons per household for the proposed development for the following categories:
 - i. Single family housing units,
 - ii. Multifamily housing units.
- n. Method of distributing water to the proposed development.
- o. A study indicating that the certificate applicant's or AAWS applicant's proposed sources of water meet the requirements established in R12-15-703 and R12-15-704. If wells proposed to provide water to the development are located within one mile of a Water Quality Assurance Revolving Fund or Superfund site, or if the water supply does not currently satisfy state aquifer water quality standards, the study shall include:
 - i. An identification of groundwater, if any, that does not meet state aquifer water quality standards within or adjacent to the wells proposed to provide water to the development.

- ii. An analysis of the possible migration of groundwater that does not meet state aquifer water quality standards which may result from the proposed use.
 - p. A copy of a notice of intent to serve agreement entered into between the owner of the proposed development and a municipal provider which is proposed to serve the proposed development.
 - q. A copy of any agreement for the delivery of specific sources of water to the proposed development.
 - r. A copy of any water service agreement between the certificate applicant or the AAWS applicant and an active management area water district, or county water augmentation authority, or a subcontract with a multi-county water conservation district.
 - s. Evidence, consistent with the requirements established in R12-15-703, of any legal right to use the proposed sources of water for the proposed development.
 - t. If the municipal provider proposed to serve the proposed development is a private water company, evidence of the proposed municipal provider's certificate of convenience and necessity as approved by the Arizona Corporation Commission.
 - u. Evidence of financial capability to construct the delivery system and any necessary treatment works and storage facilities for the proposed development consistent with the requirements of R12-15-707.
 - v. A drought response plan, if required under R12-15-703.
 - w. If the applicant qualifies as a member land of a multi-county water conservation district as provided in A.R.S. Title 48, Chapter 22, or a water district member land of an active management area water district as provided in A.R.S. Title 48, Chapter 28, Arizona Revised Statutes, evidence of such membership.
2. For an application for a designation of assured water supply, as applicable:
- a. Name of the designation of AWS applicant. The AWS applicant must be the owner of the municipal provider. If the holder of any ownership interest in the applicant is a person other than an individual, city, or town such as a corporation, partnership, or trust, a statement naming the type of legal entity and listing the interest and the extent of such interest of each principal in the entity.
 - b. Address and telephone number of the designation of AWS applicant and contact person.
 - c. A copy of the designation of AWS applicant's current service area map which includes the designation of AWS applicant's current and proposed distribution system, treatment works, and storage facilities to be analyzed by the director in determining continuous availability under R12-15-703(C), and the designation of AWS applicant's geographical coordinates.
 - d. The designation of AWS applicant's annual population projection for each calendar year for 20 calendar years from the date of application.
 - e. An analysis of current and committed demands for the designation of AWS applicant.
 - f. Projected water demands of the residential and non-residential use categories specified by the director which are necessary to make the determination required in R12-15-706.
 - g. A water supply plan.
 - h. Information required to project annual lost and unaccounted for water associated with the activities of the designation of AWS applicant.
 - i. Projected average number of persons per household for housing units being served and proposed to be served by the designation of AWS applicant for the following categories:
 - i. Single family housing units,
 - ii. Multifamily housing units.
 - j. A study indicating that the designation of AWS applicant's proposed sources of water meet the requirements established in R12-15-703 and R12-15-704. If wells proposed to serve the designation of AWS applicant's service area are located within one mile of a Water Quality Assurance Revolving Fund or Superfund site, or if the water supply does not currently satisfy state aquifer water quality standards, the study shall include:
 - i. An identification of groundwater, if any, that does not meet state aquifer water quality standards within or adjacent to the wells proposed to serve the service area.
 - ii. An analysis of the possible migration of groundwater that does not meet state aquifer water quality standards which may result from the proposed use.
 - k. Evidence, consistent with the requirements established in R12-15-703, of the designation of AWS applicant's legal right to use the proposed sources of water.
 - l. A copy of any water service agreement between the applicant and an active management area water district or a county water augmentation authority, or a subcontract with a multi-county water conservation district.
 - m. If the designation of AWS applicant is a private water company, evidence of the applicant's certificate of convenience and necessity approved by the Arizona Corporation Commission.
 - n. Evidence of financial capability to construct the delivery system and any necessary treatment works and storage facilities for the designation of AWS applicant consistent with the requirements of R12-15-707.
 - o. A drought response plan, if required under R12-15-703.
 - p. If the applicant qualifies as a member service area of a multi-county water conservation district as provided in A.R.S. Title 48, Chapter 22, a district member of a groundwater replenishment district as provided in A.R.S. Title 48, Chapter 27, or a water district member service area of an active management area water district as provided in A.R.S. Title 48, Chapter 28, evidence of such membership.
3. Any other information prescribed by the director which is necessary to make a determination of whether an assured water supply exists for the applicant.
4. A sworn statement avowing that the information contained in the application is true and correct to the best knowledge of the certificate applicant, designation of AWS applicant, or AAWS applicant.
- B.** An application for a certificate of assured water supply, a designation of assured water supply, or an analysis of assured water supply shall be signed by:

1. The individual owner if the proposed development or private water company is owned by a sole proprietor; or
 2. An authorized corporate officer, partner, or trustee if the proposed development or private water company is owned by a corporation, partnership, or trust. If the application is submitted on behalf of a corporation, a resolution enacted by the corporation which evidences that the person signing the application is so authorized by the corporation; or
 3. A city or town manager or a person employed in an equivalent position if the applicant is a city or town. The application shall also include a resolution of the governing body of the city or town authorizing the city or town manager to sign the application.
- C.** A person applying for a physical availability demonstration shall submit evidence as prescribed in subsection (A) of this Section which is required by the director to determine physical availability under R12-15-703(B) and quality of the proposed source of water under R12-15-704. After analyzing this information, the director shall provide the applicant a written determination of the proposed source of water's physical availability and quality. The demonstration may be used by any person as evidence of the physical availability and quality of those water sources described in the demonstration.
- D.** A municipal provider, other than a deemed provider, which is designated as having an assured water supply as of the effective date of this Article shall file an application to continue its designation of assured water supply within 180 days after the effective date of this Article or the director shall revoke the municipal provider's designation of assured water supply. If the municipal provider files an application within 180 days after the effective date of this Article, and the director determines that the information is insufficient to determine whether an assured water supply exists, the municipal provider shall have 60 days from the date of notification that the application is incomplete to complete its application. If the municipal provider fails to complete its application within 60 days after receiving the notice, the director may revoke the municipal provider's designation of assured water supply.
- E.** If a municipal provider is a deemed provider as of the effective date of this Article, the municipal provider's designated status shall terminate on January 1, 1998, unless the municipal provider files an application to continue its designated status on or before January 1, 1998, and the director determines the application to be complete and correct, in which case the provider's original designation shall remain effective until the director determines whether to redesignate the provider. A deemed provider which successfully applies for redesignation under this Article shall not be subject to the requirements established in this Article until January 1, 1998.
- F.** If a designated provider's designated status terminates, the provider may apply to be designated anytime thereafter.
- G.** Subject to the provisions of subsection (H) of this Section, the priority date of an application for a certificate of assured water supply, designation of assured water supply, or analysis of assured water supply shall be the date that a complete and correct application is filed with the Director. In the case of two or more pending, conflicting applications for a certificate of assured water supply, designation of assured water supply, or analysis of assured water supply which the director determines to be complete and correct, priority shall be given to the application with the earliest priority date.
- H.** An application which the director determines to be complete and correct for a certificate of assured water supply for a development for which a certificate of assured water supply has previously been issued, or for which a plat was recorded

prior to June 12, 1980, shall have priority among pending, conflicting applications according to the date on which the prior certificate of assured water supply was issued, or the date on which the prior plat had been recorded, provided that:

1. If the development has never been determined to have an assured water supply, the plat which is referenced in the application has not been substantially modified since the plat was recorded.
 2. If the development has previously been issued a certificate of assured water supply, the plat referenced in the application has not been substantially modified since the certificate of assured water supply was issued and the certificate of assured water supply has not been revoked.
- I.** The owner of six or more lots which comprise a subset of a subdivision which has been platted prior to 1980 or for which a certificate has been issued is exempt from the requirement to obtain a certificate of assured water supply if both of the following conditions are met:
1. The subdivision's plat has not changed since the effective date of this Article.
 2. Water service is currently available to each lot.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-703. Assured Water Supply Requirement - Physical Availability; Continuous Availability; Legal Availability

- A.** The director shall approve an application for a certificate of assured water supply or designation of assured water supply only if the director determines that the certificate applicant or designation of AWS applicant will have sufficient supplies of groundwater, surface water, or effluent which are physically available as determined under subsection (B) of this Section, continuously available as determined under subsection (C) of this Section, and legally available under subsection (D) of this Section.
- B.** The director shall determine whether the applicant will have a sufficient supply of water which will be physically available to satisfy the applicant's 100-year projected water demand, if the applicant is a certificate applicant, or will exceed the applicant's current and committed demands for 100 years, if the applicant is a designation of AWS applicant, in accordance with the following:
1. If the proposed source is groundwater:
 - a. The director shall determine the volume of ground water which will be available for the proposed use:
 - i. If the applicant is a designation of AWS applicant, from wells owned by the applicant which are located within the applicant's service area as indicated on the current service area map on the date of application and from proposed wells which the director determines are likely to be constructed for future uses by the designation of AWS applicant within the applicant's service area.
 - ii. If the applicant is a certificate applicant which will be served by a central distribution system, from wells which will serve the development which are located within the proposed municipal provider's service area or wells which the director determines are likely to be constructed for future uses within the service area of the proposed municipal provider.
 - iii. If the applicant is a certificate applicant which will not be served by a central distribution system, from wells which the director determines are likely to be constructed on individual lots.

- b. In determining the quantity of groundwater available for the proposed use, the applicant shall submit a hydrologic study using a method of analysis approved by the director which accurately describes the hydrology of the affected area.
- c. The director shall consider groundwater to be physically available only if the groundwater is to be withdrawn from depths not to exceed the following 100-year depth-to-static water level criteria:

Location of withdrawal / type of development	Maximum 100-year depth-to-static water level
i. Phoenix, Tucson, or Prescott Active Management Areas / developments other than dry lot developments	1000 feet below land surface
ii. Pinal Active Management Area / developments other than dry lot developments	1100 feet below land surface
iii. For areas inside of active management areas / dry lot developments	400 feet below land surface

- d. The director shall determine the 100-year depth-to-static water level by adding:
 - i. The depth-to-static water level present on the date of application for the area from which groundwater withdrawals are proposed.
 - ii. The projected declines caused by existing demand, using the projected decline in the 100-year depth-to-static water level for the area from which groundwater withdrawals are proposed to occur during the 100-year period after the date of application, calculated using records of declines for the maximum period of time for which records are available up to 25 calendar years prior to the date of application. If evidence is provided to the director of likely changes in pumpage patterns and aquifer conditions as opposed to those patterns and conditions occurring historically, the director may determine projected declines using a model rather than evidence of past declines.
 - iii. The projected decline in the depth-to-static water level for the area from which groundwater withdrawals are proposed to occur during the 100-year period after the date of application, calculated by adding the projected groundwater demand of items (B)(1)(d)(iii)(1) and (2) and subtracting the projected demand of item (B)(1)(d)(iii)(3):
 - (1) Committed demand.
 - (2) Other lots within developments for which the director has issued an analysis of assured water supply pursuant to R12-15-712.
 - (3) The projected demand of subdivided lots whose plats have been abandoned.
 - iv. The projected decline in depth-to-static water level for the area from which groundwater withdrawals are proposed which the director projects will result from the applicant's proposed use over a 100-year period.
- 2. If the proposed source of water is surface water, other than Central Arizona Project water or Colorado River water:
 - a. The director shall determine the quantity of water annually available for the proposed use taking into consideration the priority date of the right or claim by calculating 120% of the firm yield of the proposed source from the point of diversion as limited by the capacity of the diversion works; except that, if the applicant demonstrates that it will use an alternative source of water which is physically available during times of shortage in the proposed surface water supply, the director shall determine the quantity of water annually available for the proposed use by calculating 100% of the median flow of the proposed source at the point of diversion as limited by the capacity of the diversion works.
 - b. The director shall determine the firm yield or median flow as follows:
 - i. By calculating the firm yield or median flow at the point of diversion on the basis of a minimum of 20 calendar years of flow records from the point of diversion unless 20 calendar years of records are unavailable and the director determines that a shorter period of record provides information necessary to determine the firm yield or median flow; or
 - ii. By calculating the firm yield or median flow at the point of diversion using a hydrologic model which projects the firm yield or median flow taking into account a minimum of 20 calendar years of historic river flows, changes in reservoir storage facilities, and projected changes in water demand. The yield available to any applicant may be composed of rights to stored water, direct diversion, or normal flow rights. If the permit for the water right was issued less than five years prior to the date of application, the director shall require the applicant to submit evidence, as appropriate, in accordance with this subdivision.
 - 3. If the proposed source of water is Central Arizona Project water:
 - a. If an applicant has a non-declining, long-term municipal and industrial subcontract for Central Arizona Project water, the director shall calculate the quantity of water annually available for the proposed use by calculating 100% of the annual amount of water established in the subcontract;
 - b. If an applicant has a lease for Indian priority Central Arizona Project water, the director shall calculate the annual quantity of water available for the proposed use by calculating 100% of the annual amount of water established in the lease;
 - c. If an applicant has a subcontract for Central Arizona Project water other than a non-declining, long-term, municipal and industrial subcontract or a lease for Indian priority Central Arizona Project water, and the applicant demonstrates a backup supply of water, the director shall calculate the quantity of water annually available for the proposed use by calculating 100% of the annual amount of water established in the subcontract. The backup supply of water may be established with approval of the director by one or more of the following:
 - i. A drought response plan;

- ii. Recharge credits;
- iii. A contract for water with a multi-county water conservation district, an active management area water district, or a county water augmentation authority;
- iv. Evidence that the applicant is a member service area or a member land of a multi-county water conservation district, a water district member land or water district member service area of an active management area water district, or a district member of a groundwater replenishment district;
- v. Evidence of other backup supplies which are physically, continuously, and legally available.
- d. If the applicant does not submit evidence of sufficient backup supplies, the director shall determine the annual availability of the Central Arizona Project water supply by establishing a percentage of the annual amount established in the subcontract which the director determines to reasonably reflect the reliability of the applicant's Central Arizona Project water supply.
- 4. If the proposed source of water is Colorado River water:
 - a. And the priority of the contract provides reliability equal to or better than Central Arizona Project municipal and industrial water, the director shall calculate the quantity of water annually available for the proposed use by calculating 100% of the annual amount of water established in the contract;
 - b. And the contract provides reliability which is less than Central Arizona Project municipal and industrial water, and the applicant demonstrates a backup supply of water, the director shall calculate the quantity of water annually available for the proposed use by calculating 100% of the annual amount of water set forth in the contract. The backup supply of water may be established by one or more of the following:
 - i. A drought response plan;
 - ii. Recharge credits;
 - iii. A contract for water with a multi-county water conservation district, an active management area water district, or a county water augmentation authority;
 - iv. Evidence that the applicant is a member service area or a member land of a multi-county water conservation district, a water district member land or water district member service area of an active management area water district, or a district member of a groundwater replenishment district that will provide replenishment services;
 - v. Evidence of other backup supplies which are physically, continuously, and legally available.
 - c. If the applicant does not submit evidence of sufficient backup supplies, the director shall determine the annual availability of the Colorado River water supply by establishing a percentage of the annual amount established in the contract which the director determines to reasonably reflect the reliability of the applicant's Colorado River water supply.
- 5. If the proposed source of water is effluent which will be used directly:
 - a. The director shall:
 - i. Estimate the annual volume of effluent which will be available to the applicant by evaluating the current, metered production or the projected production of effluent;
 - ii. Limit the annual volume of effluent calculated to be available under subsection (B)(5)(a)(i) to the applicant's projected annual demand for the direct use of the effluent;
 - b. The applicant's proposed effluent use shall be in accordance with any water quality requirements established by the Arizona Department of Environmental Quality.
- 6. If the proposed source of water is water to be recovered from a storage project and the project is permitted to a person other than an active management area water district or a county water augmentation authority:
 - a. The director shall calculate the volume of water which will be available for 100 years as represented by credits for stored water existing on the date of application in a manner consistent with the provisions of A.R.S. Title 45, Chapter 3, Articles 1 and 3.
 - b. If the applicant proposes to use credits for stored water which do not exist at the date of application, the director shall evaluate the following in determining whether to include the proposed credits in calculating the volume of the applicant's proposed supplies:
 - i. The terms of a contract to obtain water to store in a storage project.
 - ii. The physical availability, continuous availability, and legal availability of the water proposed to be stored or the in lieu water, as applicable.
 - iii. The presence of an existing storage project which will be available for use for the proposed storage.
 - iv. The existence of all required permits of an adequate duration.
- 7. If the proposed source of water is credits for stored water which do not exist at the date of application, and which are proposed to be obtained from an active management area water district or a county water augmentation authority, the director shall consider the water represented by the credits to be physically available only if all of the following apply:
 - a. The authority or district has the legal right to sell the credits to the applicant.
 - b. The authority or district has prepared and the director has approved a plan of operation for the authority or district which the authority or district updates at least every five calendar years that evidences the authority's or district's current capability to meet the water demands of its customers for the five calendar years following the calendar year in which the authority or district submits its plan and the authority's or district's projected capability to meet the water demands of its customers for the subsequent 15 calendar years.
 - c. The authority or district and the applicant have executed an agreement for the sale of the credits. The agreement shall require:
 - i. That the applicant fund an escrow account with a sum of money necessary to purchase credits which will satisfy five times the applicant's total annual water demand as calculated in subsection (B)(7)(c)(v).
 - ii. That if the director approves the application, the funds in the escrow account shall be transferred to the authority or district.

- iii. That if the applicant is a certificate applicant, the applicant shall also pay to the authority or district each calendar year for a period of ten calendar years, beginning the calendar year in which the plat is recorded, a sum of money necessary to purchase credits which will satisfy twice the applicant's total annual water demand.
 - iv. That if the applicant is a designation of AWS applicant, the applicant shall also pay to the authority or district each calendar year for a period of ten calendar years, beginning the calendar year in which the applicant first receives stored credits from the authority or district, a sum of money necessary to purchase credits which will satisfy twice the applicant's total annual water demand.
 - v. That after the expiration of the time period specified in either subsection (B)(7)(c)(iii) or (iv), whichever is applicable, the certificate applicant or the designation of AWS applicant shall pay the authority or district an annual sum of money necessary to purchase credits which will satisfy the applicant's total annual water demand. The applicant's total annual water demand shall be calculated by subtracting both the volume of groundwater the applicant may use consistent with the management goal as established in R12-15-705 and the volume of any other source of water which the director has determined to be physically available to the applicant pursuant to this Section from the applicant's projected 100-year water demand and dividing the result by 100.
 - d. The director determines that the applicant has provided financial guarantees to ensure that the applicant will perform its obligations under the agreement required in subsection (B)(7)(c).
 - 8. If an applicant proposes to recover stored water from outside the area of impact, sufficient water must exist for the withdrawals consistent with the depth limitations established in subsection (b)(1)(c) as well as any criteria for the withdrawals prescribed in the management plan in effect at the date of application.
 - 9. If the proposed source of water is groundwater which the applicant proposes to transfer from a groundwater basin outside the active management area where the use is proposed to a basin inside the active management area where the use is proposed, the director shall calculate the volume of groundwater physically available pursuant to the provisions of subsection (B)(1), except to the extent the depth-to-static water level, decline rate, or maximum volume of water is otherwise prescribed by A.R.S. Title 45.
 - 10. If the applicant will obtain the source of water through a water exchange agreement, evidence that the source of water which the applicant or the applicant's customers will use will be physically available in accordance with the terms of this subsection.
- C. The director shall determine that an applicant has or will have a sufficient supply of water which will be continuously available if the applicant is a certificate applicant which presents sufficient evidence that adequate delivery, storage, and treatment works will be in place in a timely manner to satisfy the 100-year projected water demand of the applicant or the applicant is a designation of AWS applicant which presents sufficient evidence that adequate delivery, storage, and treatment works will be in place in a timely manner to exceed the applicant's current and committed demands for 100 years, and:
- 1. If the proposed source of water is groundwater to be withdrawn by a municipal provider, wells will be constructed in a timely manner within the municipal provider's service area which:
 - a. Are of a capacity which exceeds the applicant's current and committed demands on a continuous basis for 100 years, if the applicant is a designation of AWS applicant.
 - b. Are of a capacity which satisfies the applicant's 100-year projected water demand, if the applicant is a certificate applicant.
 - 2. If the proposed source of water is surface water other than Central Arizona Project water or Colorado River water, the projected volume to be diverted from the source is perennial at the point of diversion, unless the director determines that a continuous supply will exist because of one or more of the following:
 - a. Adequate storage facilities will be available to the applicant in a timely manner to store water for use when a volume of surface water is not available at the point of diversion to satisfy the applicant's water demands. For the purposes of this subsection (c)(2)(a), adequate storage facilities means:
 - i. For a designation of AWS applicant, facilities which can store enough water to exceed the applicant's current and committed demands for the duration of an anticipated shortage.
 - ii. For a certificate applicant, facilities which can store enough water to satisfy the applicant's 100-year projected water demand for the duration of an anticipated shortage.
 - b. The applicant has presented evidence of supplies of other sources of water which the director has determined will be physically, continuously, and legally available to the applicant to supplement the applicant's proposed surface water supplies.
 - c. The applicant will withdraw surface water from wells which are of a capacity:
 - i. To exceed the current and committed demands of the applicant on a continuous basis for 100 years, if the applicant is a designation of AWS applicant.
 - ii. To satisfy the 100-year projected water demand of the applicant on a continuous basis if the applicant is a certificate applicant.
 - d. The applicant has submitted a drought response plan which the director has determined will conserve an equal volume of water to the volume of water which is subject to drought.
 - 3. If the proposed source of water is Central Arizona Project water, the director determines that a continuous supply will exist because of one or more of the following:
 - a. Adequate storage facilities will be available to the applicant in a timely manner to store water when a volume of Central Arizona Project water is not available to meet the applicant's water demands. For the purposes of this subsection (c)(3)(a), adequate storage facilities means:
 - i. For a designation of AWS applicant, facilities which can store enough water to exceed the applicant's current and committed demands for the duration of an anticipated shortage.
 - ii. For a certificate applicant, facilities which can store enough water to satisfy the applicant's

- 100-year projected water demand for the duration of an anticipated shortage.
- b. The applicant has presented evidence of supplies of other sources of water which the director has determined will be physically, continuously, and legally available to the applicant to supplement the proposed Central Arizona Project water supplies.
- c. The applicant has submitted a drought response plan which the director has determined will conserve an equal volume of water to the volume which is subject to drought.
4. If the proposed source of water is Colorado River water, the director determines that a continuous supply will exist because of one or more of the following:
 - a. Adequate storage facilities will be available to the applicant in a timely manner to store water when a volume of Colorado River water is not available to meet the applicant's water demands. For the purposes of this subsection (c)(4)(a), adequate storage facilities means:
 - i. For a designation of AWS applicant, facilities which can store enough water to exceed the applicant's current and committed demands for the duration of an anticipated shortage.
 - ii. For a certificate applicant, facilities which can store enough water to satisfy the applicant's 100-year projected water demand for the duration of an anticipated shortage.
 - b. The applicant has presented evidence of supplies of other sources of water which the director has determined will be physically, continuously, and legally available to the applicant to supplement the proposed Colorado River water supplies.
 - c. The applicant has submitted a drought response plan which the director has determined will conserve an equal volume of water to the volume of water which is subject to drought.
5. If the proposed source of water is effluent, the applicant presents evidence that:
 - a. If the applicant is a designation of AWS applicant, the applicant's ability to exceed the applicant's current and committed demands for 100 years which are to be satisfied with effluent will not be affected by fluctuations in the supply of effluent.
 - b. If the applicant is a certificate applicant, the applicant's ability to satisfy the applicant's 100-year projected water demand which is to be satisfied with effluent will not be affected by fluctuations in the supply of effluent.
6. If the applicant will obtain the proposed source of water through a water exchange agreement, evidence that the source of water which the applicant or the applicant's customers will use will be continuously available in accordance with the provisions of this subsection.
- D.** The director shall determine that an applicant will have sufficient supplies of water which will be legally available to the applicant to satisfy the applicant's 100-year projected water demand, if the applicant is a certificate applicant, or will exceed the applicant's current and committed demands for 100 years, if the applicant is a designation of AWS applicant, in accordance with the following:
 1. If the proposed source of water is groundwater to be withdrawn within an active management area, evidence that the certificate applicant or the designation of AWS applicant has a service area right or other appropriate non-irrigation grandfathered right to withdraw the ground water.
 2. If the proposed source of water is surface water, other than Central Arizona Project water or Colorado River water:
 - a. The applicant shall submit the following evidence:
 - i. Evidence that the applicant has a certificated surface water right, decreed water right, or a pre-1919 claim for the proposed source, or evidence that the applicant is not the holder of a water right but receives water pursuant to a water right which is appurtenant to the land which is the subject of the application, providing the water right may neither be legally withheld nor severed and transferred by the holder of the water right.
 - ii. If the certificated surface water right or decreed water right pre-dates the date of application by at least five years, or the applicant submits a pre-1919 claim, evidence that the surface water supply has been used pursuant to the applicable water right or claim within the five years prior to the date of application, evidence that a court has determined that the right has not been abandoned, or evidence that the non-use would not have resulted in an abandonment of the right pursuant to A.R.S § 45-189.
 - b. And the applicant presents evidence of a certificated surface water right, a decreed water right, or a pre-1919 claim, the director shall determine that the volume of water which is legally available pursuant to the applicant's water right or claim is equal to the face value of the right or claim. If the right or claim is subsequently adjudicated, the director shall determine the volume of water which is legally available based on the adjudicated amount of water.
 3. If the proposed source of water is Central Arizona Project water, evidence that the applicant has entered into a subcontract with a multi-county water conservation district for the proposed volume of Central Arizona Project water. The director shall presume that a 50 year long-term, non-declining municipal and industrial subcontract is sufficient evidence of the legal availability to the applicant of the volume of Central Arizona Project water specified in the subcontract for 100 calendar years.
 4. If the proposed supply of water is Colorado River water, evidence that the applicant has a contract with the United States Secretary of the Interior for the proposed supply.
 5. If the proposed source of water is effluent, evidence that the applicant has the legal right to use, recapture, or reuse the effluent.
 6. If the applicant will obtain the proposed source of water through a written contract other than a water exchange agreement, a contract between a certificate applicant and the municipal provider proposed to serve the applicant, a contract with the United States Secretary of the Interior for Colorado River water, or a subcontract with a multi-county water conservation district, the director shall determine whether the proposed source of water is legally available to the applicant, the term of years for which the source is legally available, and the volume of water which is legally available as follows:
 - a. The director shall determine that the proposed source of water is legally available to the applicant only if:
 - i. The person providing the water under the contract has a legal right to the water in accordance with the terms of this subsection.

- ii. The director determines that the terms of the contract will ensure that the proposed source of water will be delivered to the applicant.
 - b. The director shall determine the term of years for which the proposed source of water is legally available based on the term of years remaining in the contract.
 - c. The director shall determine the quantity of water legally available to the applicant based on the volume established in the contract.
7. If the applicant is a certificate applicant, the applicant has submitted evidence indicating that the applicant has entered into a notice of intent to serve agreement signed by both the applicant and the municipal provider proposed to serve the applicant, which contains a statement of the municipal provider's intent to serve all of the proposed lots and uses that are subject to this determination of an assured water supply.
 8. If the applicant is a certificate applicant and the municipal provider proposed to serve the applicant is a city or town, the applicant has submitted evidence indicating that the applicant is located within the incorporated limits of the city or town or the applicant has submitted evidence of the legal right of the city or town to serve water to the applicant outside the city or town's incorporated limits.
 9. If the applicant is a certificate applicant and the municipal provider proposed to serve the applicant is a private water company, the applicant has submitted evidence:
 - a. Of the private water company's certificate of convenience and necessity approved by the Arizona Corporation Commission. The director shall only determine that the water provided by the private water company is legally available if the certificate of convenience and necessity is free of conditions which would likely result in the revocation of the certificate of convenience and necessity.
 - b. That the applicant is located within the certificated area or within any other area in which the Arizona Corporation Commission authorizes the private water company to serve water.
 10. If the applicant is a private water company applying for a designation of assured water supply, evidence that the applicant has a certificate of convenience and necessity approved by the Arizona Corporation Commission authorizing the proposed water use.
 11. If the applicant will obtain the proposed source of water through a water exchange agreement, evidence that the applicant's water exchange agreement satisfies the requirements of A.R.S. Title 45.
 12. If the director can only determine the proposed source of water to be physically available under this Section because of the use of storage facilities by the applicant, evidence of the applicant's legal right to store water in the facilities.
- E.** Except for a certificate applicant which is a member land of a multi-county water conservation district or a water district member land of an active management area water district, for the purposes of determining the physical, continuous, and legal availability of surface water, the director shall determine that the proposed source is unavailable if the certificate applicant does not independently obtain a renewable water source and the municipal provider is undesignated and would fail to satisfy the requirements established in R12-15-705 if the provider were subject to those requirements.
- F.** To determine compliance with the requirements established in subsections (B), (C), and (D) of this Section, the director shall maintain a record, updated annually, of the total water supply and demand status for each holder of a certificate of assured water supply and designation of assured water supply.
- G.** The director shall make an initial determination that a certificate applicant or a designation of AWS applicant satisfies the requirements established in subsections (B), (C), and (D) of this Section if the director determines that:
1. For a certificate applicant, the volume of the applicant's proposed supply of water which the director determines to be physically, continuously, and legally available in accordance with the provisions of this Section is equal to or exceeds the volume of the applicant's 100-year projected water demand.
 2. For a designation of AWS applicant, the volume of the applicant's proposed supply of water which the director determines to be physically, continuously, and legally available in accordance with the provisions of this Section exceeds the volume of the applicant's current and committed demands for 100 years.
- H.** To determine the volume of the supply of surface water and effluent which is physically, continuously, and legally available for an applicable period of years, the director will multiply the number of years in that period by the annual volume of those sources of water which the director determines to satisfy the requirements of this Section.
- I.** The volume of groundwater which the director determines to satisfy the requirements of this Section shall not exceed the volume of groundwater which the director determines to be consistent with the management goal of the active management area pursuant to R12-15-705.
- J.** After the director calculates the volume of water, from any source, which the holder of a certificate or designation has proven to satisfy the requirements of this Section, the director shall annually subtract from the volume attributed to groundwater and stored credits the volume of groundwater and stored credits which the holder of the certificate or designation uses each calendar year.
- K.** For a holder of a designation whose designation has been modified under R12-15-709 that calendar year, the director shall add any additional volume of water, from any source, which the director determines is physically, continuously, and legally available for the proposed use.
- L.** The director shall determine that a holder of a certificate or a designation is no longer in compliance with the requirements established in this Section if the holder of the certificate or the designation no longer has a physically, continuously, and legally available volume of water from any source:
1. Which equals or exceeds the holder's remaining projected 100-year water demand, if the holder is a holder of a certificate; or
 2. Which exceeds the holder's current and committed demands for 100 years, if the holder is a holder of a designation.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-703.01. Assured Water Supply Requirement - Legal Availability of Central Arizona Project Water or Colorado River Water Leased from an Indian Community

- A.** In addition to the water supplies that the Director determines are legally available to an applicant under R12-15-703(D), the Director shall determine that Colorado River water or Central Arizona Project water leased from an Indian community is legally available to an applicant for a certificate or designation of assured water supply in an amount determined under this Section, if both of the following apply:

1. The water leased has a priority equal to or higher than Central Arizona Project municipal and industrial water.
 2. The Indian community is expressly authorized by an Act of Congress to lease the water for use off Indian community lands.
- B.** For water that meets the requirements of subsection (A), the Director shall determine that there is a legally available supply of water for 100 years for the annual amount of water available under the lease, if either of the following apply:
1. The water upon which the assured water supply application is based is available under the lease for at least 100 years from any time during the year in which the applicant files the assured water supply application.
 2. The term of the lease has less than 100 years remaining in the year in which the applicant files the assured water supply application, and the applicant establishes the availability of a supplemental water supply, that together with the leased water, provides a 100-year water supply. The supplemental water supply shall be one of the following supplies of water:
 - a. Groundwater, if the groundwater is physically, continuously, and legally available to the applicant under R12-15-703 and if the groundwater use is consistent with achieving the management goal under R12-15-705.
 - b. Water recovered through the use of long-term storage credits held by the applicant, if both of the following apply:
 - i. The water to be recovered through the use of long-term storage credits is physically and continuously available to the applicant under R12-15-703.
 - ii. If the applicant is to use the long-term storage credits before the beginning of the lease term, the applicant has obtained a recovery well permit that allows the applicant to recover water by redeeming the long-term storage credits.
 - c. Water recovered through the use of long-term storage credits that will be accrued by the applicant, if all of the following apply:
 - i. No more than 20 years of the applicant's supplemental water supply will be provided by the long-term storage credits.
 - ii. The applicant demonstrates to the Director that it will accrue the long-term storage credits within 20 years of the effective date of the designation or certificate by storing the water under an issued water storage permit at a permitted storage facility.
 - iii. The applicant has a supply of water to be stored that is physically, continuously, and legally available to the applicant under R12-15-703 for the time necessary to accrue the needed long-term storage credits.
 - iv. The water to be recovered through the use of long-term storage credits is physically and continuously available to the applicant under R12-15-703.
 - v. If the applicant is to use the long-term storage credits before the beginning of the lease term, the applicant has obtained a recovery well permit that allows the applicant to recover water by redeeming the long-term storage credits.
 - vi. If the applicant is a private water company, the Arizona Corporation Commission has granted any necessary approval to the applicant for the storage of the water.
- C.** If the Director finds that the applicant has a legally available supply of water for 100 years under subsection (B) and designates the applicant as having an assured water supply, or if the Director previously determined that the applicant's Colorado River water or Central Arizona Project water leased from an Indian community was legally available for 100 years under R12-15-703(D) and designated the applicant as having an assured water supply, the Director shall determine that the city, town, or private water company designated as having an assured water supply continues to have a legally available supply of water for 100 years for the annual amount of water available under the lease, if both of the following apply:
1. One of the following apply:
 - a. The lease has at least 50 years remaining in its term.
 - b. The lease has at least 40 years remaining in its term, and the city, town, or private water company provides evidence to the Director of active and ongoing negotiations with the Indian community to renew or re-negotiate the lease.
 2. One of the following apply:
 - a. Of the total water supplies that the city, town, or private water company establishes as physically, continuously, and legally available under R12-15-703 and under this Section during any year, no more than 15% of those water supplies are obtained through leases with Indian communities.
 - b. Groundwater will be physically, continuously, and legally available to the city, town, or private water company under R12-15-703 at the end of the lease term to substitute for the leased water for the remainder of the 100-year period, and one of the following apply:
 - i. The projected use of groundwater is consistent with achieving the management goal under R12-15-705.
 - ii. The city, town, or private water company enters into a consent order with the Director under which the city, town, or private water company agrees to replace through replenishment or storage any groundwater used at the end of the lease term that is not consistent with achieving the management goal under R12-15-705. The city, town, or private water company shall agree in the consent order that its specific performance is the only remedy in event of default under the consent order.
 - c. A non-groundwater source of water will be physically, continuously, and legally available to the city, town, or private water company under R12-15-703 at the end of the lease term to substitute for the leased water for the remainder of the 100-year period.
 - d. The governing board or council of the city, town, or private water company submits to the Director a resolution requesting that the city, town, or private water company be allowed to increase its projected use of Indian lease water from 15%, as allowed by subsection (C)(2)(a) of this Section, to 20%, and the Director finds that all of the following apply:
 - i. Of the total water supplies that the city, town, or private water company establishes as physically, continuously, and legally available under

R12-15-703 and this Section during any year, no more than 20% of those water supplies are obtained through leases with Indian communities.

- ii. Of the total water supplies that the city, town, or private water company establishes as physically, continuously, and legally available under R12-15-703 and this Section during any year, no more than 15% of those water supplies are obtained through any single lease with an Indian community.
- iii. The city, town, or private water company does not meet the requirements of subsection (C)(2)(a), (b), or (c) of this Section.

Historical Note

New Section made by final rulemaking at 7 A.A.R. 3038, effective June 18, 2001 (Supp. 01-2).

R12-15-704. Assured Water Supply Requirement - Water Quality

- A. The director shall approve an application for a certificate of assured water supply or designation of assured water supply only if the applicant submits information from which the director determines that the applicant's proposed water sources will satisfy existing state water quality requirements and any other water quality standards which are effective on the date of application and which are applicable to the proposed water use after any required treatment.
- B. In making the determination described in subsection (A) of this Section, the director may consider expected changes in the quality of the proposed sources of water, including the migration of poor quality groundwater.
- C. The director shall establish as a condition for a designation of assured water supply that the municipal provider shall satisfy any state water quality requirements established for the applicant's proposed use after the date of designation. If the municipal provider fails to satisfy this condition, the director may terminate the designation of assured water supply after consultation with the director of the Arizona Department of Environmental Quality.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-705. Assured Water Supply Requirement - Consistency with Management Goal

- A. The Director shall approve an application for a certificate of assured water supply or a designation of assured water supply only if the applicant submits information from which the Director determines that the proposed groundwater use will be consistent with the achievement of the management goal of the active management area.
- B. In the Prescott Active Management Area, the proposed use of an applicant for a certificate of assured water supply or a designation of assured water supply is consistent with the achievement of the management goal of the active management area, regardless of the volume of groundwater withdrawn from within the active management area for the proposed use, until the Director enters a final decision and order determining that the Prescott Active Management Area is no longer at safe-yield under the provisions of this Article.
- C. The Director shall determine whether the Prescott Active Management Area continues to be at safe-yield by analyzing a minimum of three annual data reports containing information on:
 - 1. Groundwater levels,
 - 2. Changes in groundwater levels,

- 3. Pumpage volumes from confined and unconfined aquifers,
- 4. Long-term precipitation records,
- 5. Surface water flow records,
- 6. A comparative evaluation of groundwater conditions as related to climatic normal conditions.

- D. When the reports from three successive annual data reports using normalized information, including committed demand and demands associated with the groundwater allocation for designated entities for calendar year 1995, made in accordance with subsection (F)(2), show ongoing water level declines and increased pumpage, the Director shall make a preliminary determination that the Prescott Active Management Area is no longer at safe-yield.
- E. Before entering a final decision and order that the Prescott Active Management Area is no longer at safe-yield, the Director shall publish a notice once each week for two consecutive weeks in a newspaper of general circulation in Yavapai County stating that the Director shall conduct a hearing to determine whether the Prescott Active Management Area is no longer at safe-yield. After publishing notice in the manner described above, the Director shall hold a hearing in the Prescott Active Management Area within 30 days of the last notice. Any person may appear at the hearing and submit oral or documentary evidence on the issue of whether the Prescott Active Management Area is no longer at safe-yield. A person may submit written comments, concerning matters discussed at the hearing, within 30 days after the hearing. Within 180 days after the termination of the public comment period, the Director shall enter a final decision and order, determining either that the Prescott Active Management Area remains at safe-yield or that the Prescott Active Management Area is no longer at safe-yield.
- F. If the Director enters a final decision and order determining that the Prescott Active Management Area is no longer at safe-yield, the Director shall calculate the volume of groundwater that may be withdrawn consistent with the management goal of the active management area in accordance with subsection (A) by adding to the volume of assured water supply credits determined in accordance with subsection (M), the volume calculated as follows:
 - 1. If the application is for a certificate of assured water supply:
 - a. Subtract the declaration year from 2025, unless the date of application occurs subsequent to the declaration year, in which case subtract the year of the date of application from 2025.
 - b. Determine the total volume of water, from any source, projected by the Director to meet 100 percent of the applicant's water demands for the 15th calendar year after the date of application, consistent with the conservation requirements established in the management plan in effect on the date of application for the municipal provider proposed to serve the applicant.
 - c. Multiply the number determined in subsection (F)(1)(a) by the amount calculated in subsection (F)(1)(b).
 - d. Divide the product obtained in subsection (F)(1)(c) by two. The minimum volume that may be calculated in this subsection is zero acre-feet.
 - 2. If the application is for a designation of assured water supply:
 - a. And, except as provided in subsection (F)(2)(c), the date of application occurs within 180 days after the declaration date:

- i. Multiply 100 by the volume of groundwater withdrawn from within the active management area by the applicant during the declaration year or calendar year 1995, whichever volume is greater, consistent with the conservation requirements established for the applicant in the management plan in effect on the date of application.
- ii. Determine the volume of the applicant's total water demand, from any source, for the declaration year, consistent with the conservation requirements established for the applicant in the management plan in effect on the date of application.
- iii. Determine the volume of the applicant's total water demand, from any source, for the 15th calendar year after the declaration year, consistent with the conservation requirements established for the applicant in the management plan in effect on the date of application.
- iv. Subtract the volume calculated in subsection (F)(2)(a)(ii) from the volume calculated in subsection (F)(2)(a)(iii).
- v. Subtract the declaration year from 2025.
- vi. Multiply the volume calculated in subsection (F)(2)(a)(iv) by the number calculated in subsection (F)(2)(a)(v).
- vii. Divide the product obtained in subsection (F)(2)(a)(vi) by two.
- viii. Add the volume calculated in subsection (F)(2)(a)(vii) to the volume calculated in subsection (F)(2)(a)(i).
- b. And, except as provided in subsection (F)(2)(c), the date of application does not occur within 180 days after the declaration date, subtract from the volume calculated in subsection (F)(2)(a) the volume of groundwater calculated in subsection (F)(2)(b)(iii). The volume shall be calculated as follows:
 - i. Determine the volume of groundwater withdrawn by the applicant from within the active management area during the period beginning January 1 of the declaration year and ending either December 31 of the declaration year or December 31 of the calendar year before the date of the application, whichever is later.
 - ii. Multiply the volume of groundwater withdrawn by the applicant from within the active management area in the declaration year by the number of calendar years in the period beginning with the declaration year and ending with the calendar year before the date of application.
 - iii. Subtract from the volume calculated in subsection (F)(2)(b)(i) the volume calculated in subsection (F)(2)(b)(ii).
- c. And the applicant did not exist as of the declaration date, or the date of application occurs after calendar year 2025, the maximum volume of groundwater that the applicant may use for the proposed use for 100 years from the date of application consistent with the achievement of the management goal for the Prescott Active Management Area is zero acre-feet.
3. If the Director receives an application for a certificate of assured water supply or a designation of assured water supply before the declaration year, the Director shall perform the calculations described in subsection (F)(1) or (2)

after the Director enters a final decision and order determining that the Prescott Active Management Area is no longer at safe-yield.

- G. Except as provided in subsection (I) or (J), with respect to the Phoenix and Tucson Active Management Areas, the Director shall determine the volume of groundwater that a certificate or a designation of AWS applicant may withdraw from within the active management area for the proposed use for 100 years from the date of application consistent with the management goal of the active management area by adding to any volume of credits determined by the Director, in accordance with subsections (K) and (M), the volume of groundwater calculated as follows:
 1. If the application is for a certificate of assured water supply, multiply the applicable allocation factor located in the table below by the total volume of water, from any source, projected to meet 100 percent of the applicant's water demand in the 15th calendar year after the date of application, consistent with the applicable conservation requirements established in the management plan in effect on the date of application for the municipal provider proposed to serve the applicant.

LOCATION OF PROPOSED DEVELOPMENT	MANAGEMENT PERIOD / DATE OF APPLICATION	ALLOCATION FACTOR
TUCSON AMA	Second	15
	Third	8
	Fourth	4
	Fifth	2
	After Fifth	0
PHOENIX AMA	Second	7.5
	Third	4
	Fourth	2
	Fifth	1
	After Fifth	0

2. If the application is for a designation of assured water supply and the applicant provided water to its customers before the effective date of this Article, multiply the total volume of water, from any source, consistent with the first intermediate conservation requirement established in the second management plan, provided by the applicant to its customers during the calendar year before the effective date of this Article by 15 if the applicant is located in the Tucson Active Management Area or by 7.5 if the applicant is located in the Phoenix Active Management Area.
3. If the application is for a designation of assured water supply, and the applicant commences providing water to its customers on or after the effective date of this Article, zero acre-feet of groundwater.
- H. Except as provided in subsection (I) or (J), with respect to the Pinal Active Management Area, the Director shall determine the volume of groundwater that an applicant for a certificate of assured water supply or a designation of assured water supply may withdraw from the active management area consistent with the achievement of the management goal of the active management area by adding the volume of assured water supply

ply credits, determined annually in accordance with subsection (M), to the volume calculated as follows:

1. If the applicant is a certificate applicant that will be served by a small municipal provider or a municipal provider that is required to comply with a total gallons per capita per day requirement or a non-per capita requirement established in the management plan in effect on the date of application for the Pinal Active Management Area:
 - a. Determine the proposed development's 15-year build-out population; and
 - b. Multiply the population determined in subsection (H)(1)(a) by the product of 125 gallons per capita per day and the number of days in the calendar year.
 2. If the applicant is a certificate applicant that will be served by an existing municipal provider that is required to comply with a residential gallons per capita per day requirement established in the management plan in effect on the date of application for the Pinal Active Management Area, zero acre-feet.
 3. If the applicant is a certificate applicant that will be served by a new municipal provider that is required to comply with a residential gallons per capita per day requirement established in the management plan in effect on the date of application for the Pinal Active Management Area:
 - a. Determine the proposed development's 15-year build-out population; and
 - b. Multiply the population determined in subsection (H)(3)(a) by the product of 62.5 gallons per capita per day and the number of days in the calendar year.
 4. If the applicant is a designation of AWS applicant that is a small municipal provider or a municipal provider that is required to comply with a total gallons per capita per day requirement or a non-per capita program requirement established in the management plan in effect on the date of application for the Pinal Active Management Area:
 - a. Determine the applicant's service area population for the calendar year; and
 - b. Multiply the population determined in subsection (H)(4)(a) by the product of 125 gallons per capita per day and the number of days in the calendar year.
 5. If the applicant is a designation of AWS applicant that is an existing municipal provider that is required to comply with a residential gallons per capita per day requirement established in the management plan in effect on the date of application for the Pinal Active Management Area, the largest volume of groundwater withdrawn by the applicant within the active management area in any one calendar year, from calendar year 1980 through calendar year 1989.
 6. If the applicant is a designation of AWS applicant that is a new municipal provider that is required to comply with a residential gallons per capita per day requirement established in the management plan in effect on the date of application for the Pinal Active Management Area:
 - a. Determine the applicant's service area population for the calendar year; and
 - b. Multiply the population determined in subsection (H)(6)(a) by the product of 62.5 gallons per capita per day and the number of days in the calendar year.
- I.** If a municipal provider that is not a deemed provider in the Phoenix, Tucson, or Pinal Active Management Areas files an application within 180 days after the effective date of this Article as required by R12-15-702(D), the Director shall determine that the proposed use of the applicant is consistent with the management goal of the active management area for calendar years 1996, 1997, and 1998, regardless of the volume of groundwater withdrawn by the applicant within the active management area. Beginning calendar year 1999, the applicant shall comply with the provisions of this Section.
- J.** If a municipal provider that is a deemed provider files an application to be designated on or before January 1, 1997, the Director shall determine that the proposed use of the applicant is consistent with the management goal for the calendar years 1998, 1999, and 2000, regardless of the volume of groundwater withdrawn by the applicant within the active management area. Beginning calendar year 2001, the applicant shall comply with the provisions of this Section.
- K.** After the Director issues a designation of assured water supply to a municipal provider in the Tucson or Phoenix Active Management Area, the Director shall, before the beginning of each calendar year, add a volume of groundwater to the volume calculated for the applicant in subsection (G) to determine whether the use of the provider is consistent with the achievement of the management goal of the active management area. The Director shall calculate the volume of groundwater by multiplying the provider's total water use, from any source, in the previous calendar year, by the standard incidental recharge factor of 4 percent. The Director may establish a different incidental recharge factor for the provider if the provider demonstrates to the satisfaction of the Director that the ratio of the average annual amount of incidental recharge, expected to be attributable to the municipal provider during the management period, to the average annual amount of water expected to be withdrawn, diverted, or received for delivery by the provider for use within its service area during the management period is different than 4 percent. If a provider applies for a variance from the standard incidental recharge factor, the provider shall do so in a manner consistent with A.R.S. § 45-565.01(D)(1).
- L.** The Director shall establish an assured water supply credit for the extinguishment of a grandfathered groundwater right if all of the following conditions are met:
1. The owner of the right submits to the Director a notarized statement of intent to extinguish the grandfathered groundwater right.
 2. The certificate evidencing the grandfathered groundwater right is returned to the Director or the Director receives an affidavit evidencing that the certificate has been lost. If only a portion of a type 1, non-irrigation grandfathered right or irrigation grandfathered right is extinguished, the Director shall issue a new certificate for the remainder of the right.
 3. If the right being extinguished is a type 1, non-irrigation grandfathered right or an irrigation grandfathered right, the owner of the right submits sufficient evidence of ownership of the land associated with the grandfathered groundwater right.
 4. If the grandfathered groundwater right is located in the Prescott Active Management Area, all of the following conditions are met:
 - a. The land to which the right is appurtenant has not been and will not be subdivided pursuant to a preliminary plat or a final plat that was approved by a city, town, or county before August 21, 1998.
 - b. The land to which the right is appurtenant is not and will not be the location of a subdivision for which a complete and correct application for a certificate of assured water supply was submitted to the Director before August 21, 1998.

- c. The land to which the right is appurtenant has not been physically developed for industrial, commercial, or other non-irrigation use.
- M.** The amount of the assured water supply credit established for extinguishing a grandfathered right is as follows:
1. For the extinguishment of an irrigation grandfathered right, or a portion of an irrigation grandfathered right in the Phoenix or Tucson Active Management Area, the amount calculated by multiplying 1.5 acre-feet per acre by the number of irrigation acres associated with the extinguished right and multiplying the product by the difference calculated by subtracting the calendar year of extinguishment from 2025. If only a portion of an irrigation grandfathered right is extinguished, only those irrigation acres associated with the portion of the right that is extinguished shall be included in the calculation.
 2. For the extinguishment of an irrigation grandfathered right in the Pinal Active Management Area, after the right or a portion of the right is extinguished, add annually the product of 3.0 acre-feet per acre multiplied by the number of irrigation acres associated with the extinguished right in each calendar year before 2000, and the product of 1.5 acre-feet per acre multiplied by the number of irrigation acres associated with the extinguished right for each calendar year thereafter. If only a portion of an irrigation grandfathered right is extinguished, only those irrigation acres associated with the portion of the right that is extinguished shall be included in the calculation.
 3. For the extinguishment of a type 1, non-irrigation grandfathered right or a portion of the non-irrigation grandfathered right extinguished in the Phoenix or Tucson Active Management Area, the amount calculated by:
 - a. Subtracting the calendar year of extinguishment from 2025.
 - b. Multiplying 1.5 acre-feet per acre by the number of acres to which the type 1, non-irrigation grandfathered right is appurtenant.
 - c. Multiplying the product calculated in subsection (M)(3)(b) by the difference calculated in subsection (M)(3)(a).
 4. For the extinguishment of a type 1, non-irrigation grandfathered right or a portion of the non-irrigation grandfathered right in the Pinal Active Management Area, the amount calculated annually by multiplying 1.5 acre-feet per acre by the number of acres to which the type 1 non-irrigation right is appurtenant. If only a portion of the type 1 non-irrigation right is extinguished, only those acres associated with the portion of the right that is extinguished shall be included in the calculation.
 5. For the extinguishment of a type 2, non-irrigation grandfathered right in the Prescott, Phoenix, or Tucson Active Management Area, the amount calculated by multiplying the number of acre-feet indicated on the certificate by the difference between the calendar year of extinguishment and 2025.
 6. For the extinguishment of a type 2, non-irrigation grandfathered right in the Pinal Active Management Area, an annual amount equal to the number of acre-feet indicated on the certificate.
 7. For the extinguishment of an irrigation grandfathered right or a type 1 non-irrigation grandfathered right in the Prescott Active Management Area:
 - a. Through December 31, 2010:
 - i. If the irrigation acres associated with the extinguished right were irrigated for at least four of the six calendar years preceding January 1, 2000, the amount calculated by multiplying 1.5 acre-feet per acre by the number of irrigation acres associated with the extinguished right and multiplying that product by 25.
 - ii. If the irrigation acres associated with the extinguished right were not irrigated for at least four of the six calendar years preceding January 1, 2000, the amount calculated by multiplying 1.5 acre-feet per acre by the number of irrigation acres associated with the extinguished right and multiplying the product by the difference calculated by subtracting the calendar year in which the statement of intent to extinguish is filed from 2025.
 - b. After December 31, 2010, the amount calculated by multiplying 1.5 acre-feet per acre by the number of irrigation acres associated with the extinguished right and multiplying the product by the difference calculated by subtracting the calendar year in which the statement of intent to extinguish is filed from 2025.
- N.** A municipal provider that receives credits for the extinguishment of a grandfathered groundwater right may convey the credits. The holder of a certificate may not convey credits obtained for the extinguishment of a grandfathered groundwater right unless the credits are conveyed as part of the transfer of the certificate to which they have been applied.
- O.** If an irrigation grandfathered right that is extinguished has a debit balance in its flexibility account established under A.R.S. § 45-467, the Director shall subtract the amount of the debit from the amount of the assured water supply credit calculated in subsection (M).
- P.** The Director shall not give any assured water supply credit for the extinguishment of a type 1, non-irrigation grandfathered right that was requested to be included by a city or town in the Tucson Active Management Area in the determination made under A.R.S. § 45-463(F) nor to the holder of a type 1, non-irrigation grandfathered right who the Director determines is likely to continue to receive groundwater from an undesignated municipal provider pursuant to its service area right or pursuant to a groundwater withdrawal permit. The Director shall not give any assured water supply credit for the extinguishment of a type 2, non-irrigation grandfathered right that was issued for the purpose of allowing mineral extraction or the generation of electrical power.
- Q.** The volume of groundwater that the Director determines may be used by a person consistent with the achievement of the management goal of the active management area pursuant to subsection (F), (G), (K), or (M) may be used by the person in any calendar year.
- R.** To determine compliance with the consistency with management goal requirements of this Section for the Prescott, Phoenix, or Tucson Active Management Areas, the Director shall maintain an account, updated annually, of the water supply and demand status for each holder of a certificate of assured water supply and each holder of a designation of assured water supply. The Director shall subtract annually the volume of groundwater, except for groundwater excluded under subsection (T), that is withdrawn from within the applicable active management area and used by the holder of the certificate or designation, from the volume of groundwater that the Director determines under subsections (F), (G), (K), and (M) that the holder of the certificate or designation may withdraw from within the active management area and use consistent with the achievement of the management goal of the active management area. The Director shall determine that the use of a

holder of a certificate or a designation is not consistent with the management goal of the active management area if the holder of the certificate or the designation has used more groundwater withdrawn from within the active management area than the volume that the Director has determined the holder may use consistent with the achievement of the management goal for the active management area.

S. To determine compliance with the consistency with management goal requirement of this Section for the Pinal Active Management Area:

1. The Director shall maintain an account, updated annually, of the groundwater supply and demand status for each holder of a certificate of assured water supply and each holder of a designation of assured water supply. After the Director calculates under subsection (H) the volume of groundwater that the holder of the certificate or designation may withdraw within the active management area and use for a calendar year consistent with the management goal of the active management area, the Director shall determine compliance with this Section by determining the volume of groundwater withdrawn from within the active management area that is used by the applicant during the calendar year.
2. The Director shall determine that the holder of a certificate or designation is not consistent with the management goal of the active management area if the holder of the certificate or the designation has used more groundwater withdrawn within the active management area during the calendar year than the maximum annual allotment of groundwater that the Director has determined the holder may use consistent with the achievement of the management goal for the active management area for the calendar year.
3. If the Director determines that the holder of a certificate or designation uses less groundwater withdrawn from within the active management area in any calendar year than the maximum annual allotment of groundwater established for the holder for that calendar year, the Director shall add to the next calendar year's groundwater allotment the amount calculated by subtracting the volume of groundwater used in the calendar year from the maximum groundwater allotment for the calendar year.

T. For a holder of a certificate or designation, the Director, upon application, shall exclude the following volumes of groundwater, withdrawn within the applicable active management area and used by the holder, to determine under subsections (R) and (S) whether the holder's use continues to be consistent with the achievement of the management goal for the active management area:

1. If the Director determines that a surface water supply is physically available to the holder under R12-15-703 and the volume of the supply actually available to the holder during a calendar year is equal to or less than the drought volume for the supply, the volume of groundwater, other than the groundwater that is accounted for under subsections (R) or (S), withdrawn within the active management area that, when combined with the holder's available surface water supply, is equal to or less than the holder's drought volume.
2. The volume of groundwater withdrawn from within the active management area to which all of the following apply:
 - a. The Director receives a written determination from the Director of the Arizona Department of Environmental Quality, stating that the quality of the groundwater pumped or exchanged fails to meet

state aquifer water quality standards, the groundwater is a threat to future drinking water supplies, and the removal and use of the contaminated groundwater is an appropriate remedial action.

- b. The groundwater pumped has either been treated or blended to achieve the water quality standards or exchanged for other water supplies that achieve such standards.
 - c. The groundwater would not have otherwise been removed from the aquifer, or the withdrawal of the groundwater will accelerate the treatment of groundwater at a designated state or federal groundwater clean-up site.
 - d. The groundwater was withdrawn before the end of calendar year 2025.
3. Any volume of groundwater withdrawn within a portion of an active management area that is exempt from conservation requirements under A.R.S. Title 45 due to water-logging. The Director shall review the application of this exclusion on a periodic basis, not to exceed 15 years.
- U.** For the purpose of performing the calculations prescribed in this Section, the Director shall evaluate an application for a designation of assured water supply, filed by a city or town that is deemed to have an assured water supply under A.R.S. § 45-576(E), in the same manner as any other municipal provider.
- V.** An applicant for a dry lot subdivision comprised of 20 or fewer lots is exempt from the requirements of this Section.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

Amended by final rulemaking at 8 A.A.R. 4390, effective November 22, 2002 (Supp. 02-3).

R12-15-706. Assured Water Supply Requirement - Consistency with Management Plan

- A.** The director shall approve an application for a certificate of assured water supply or a designation of assured water supply only if the applicant's projected groundwater use is consistent with the management plan as determined at the date of application for the applicable active management area. The director shall determine that an applicant's projected groundwater use is consistent with the management plan only if the applicant submits a water supply plan which satisfies the requirements of this Section.
- B.** The director shall determine that a designation of AWS applicant which is providing water to customers as of the date of application satisfies the requirements of this Section if the director determines that either:
1. The applicant is in compliance with its applicable management plan requirements in the most recent calendar year for which data is available prior to the date of application; or
 2. If the applicant has signed a stipulation and consent order which is in effect on the date of the application or which becomes effective during the time of review of the application to remedy non-compliance with the management plan requirements, that the applicant is in compliance with the terms of the stipulation and consent order.
- C.** The director shall determine that a designation of AWS applicant that has not commenced serving water to customers as of the date of application satisfies the requirements of this Section if the applicant submits a water supply plan which demonstrates to the director that compliance with management plan requirements will be achieved through the use of conservation or augmentation measures.

- D. The director shall determine that a certificate applicant for a development of more than 50 lots satisfies the requirements of this Section if the applicant presents a water supply plan to the director indicating that compliance with management plan requirements will be achieved through the use of conservation or augmentation measures. The plan shall be specific enough to allow the director to calculate the water requirements per lot and for non-residential areas and common areas. The applicant shall also submit an analysis of the effect of the applicant's water use on the applicant's municipal provider's ability to comply with applicable management plan requirements.
 - E. The director shall determine that a certificate applicant that proposes to be served by a municipal provider which is not in compliance with its management plan requirements and has not signed a stipulation and consent order to remedy its non-compliance is consistent with the management plan only if the director determines that the certificate applicant's water supply plan is consistent with the proposed provider's applicable management plan requirements.
 - F. A certificate applicant for a development of 50 or fewer lots is exempt from the requirements of this rule.
 - G. The director may revoke the designation of a municipal provider if the provider's management plan requirements have been violated in two or more consecutive calendar years, and the provider either fails to amend its water supply plan in a manner which the director determines will rectify the non-compliance or fails to sign a stipulated agreement to remedy the violation.
 - H. If a designation of AWS applicant which is serving water on the date of application has a request for an administrative review of or variance from its management plan requirements pending on the date of application, the director shall not make a finding regarding compliance with this Section until the Director has issued a final decision and order on the request or the request has been settled.
- 3. The applicant is a member land of a multi-county water conservation district.
 - D. To make a finding under subsection (B)(1) of this Section, the director shall first determine that, except for the financial capability requirement established in this Section, the applicant for a certificate of assured water supply satisfies all requirements established for certificate applicants in this Article. Upon making this determination, the director shall issue a preliminary certificate of assured water supply to the applicant, conditioned upon the platting authority's approval of the applicant's financial capability. Upon receipt of evidence that the platting authority has determined that the applicant has sufficient financial capability to construct the requisite water utilities, and upon determining that the platting authority's determination ensures financial capability for assured water supply purposes, the director shall issue a final certificate of assured water supply to the applicant.
 - E. Except as provided in subsection (F) of this Section, the director shall determine that a municipal provider which is an applicant for a designation of assured water supply satisfies the requirement established in subsection (A) of this Section if the provider either:
 - 1. Has constructed all necessary treatment works and storage facilities,
 - 2. Has received approval from the Arizona Corporation Commission for the financing of the construction of the requisite treatment and storage facilities, or
 - 3. Is a member service area of a multi-county water conservation district.
 - F. Where the applicant for a designation is a city or town, the director shall determine that the applicant satisfies the requirement established in subsection (A) of this Section if the director receives evidence that the city or town either:
 - 1. Has built the requisite treatment and storage facilities,
 - 2. Has adopted a five-year capital improvement plan which envisions the construction of the necessary facilities and the director receives a signed statement from the chief financial officer of the city or town certifying that finances are available to implement that portion of the five-year plan pertaining to treatment and storage facilities, or
 - 3. Is a member service area of a multi-county water conservation district.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-707. Assured Water Supply Requirement - Financial Capability

- A. The director shall approve an application for a certificate of assured water supply or a designation of assured water supply only if the applicant submits information from which the director determines that the applicant has the financial capability to construct the delivery system and any treatment and storage works required for the proposed use.
- B. The director shall determine that an applicant for a certificate of assured water supply satisfies subsection (A) of this Section with respect to the construction of the requisite delivery system, if the director finds either:
 - 1. That the applicable platting authority has determined that the applicant satisfies the platting authority's standards for financial capability to construct the requisite water utilities established pursuant to A.R.S. §§ 9-463.01(C)(8) or 11-806.01(G), and that the platting authority's standards ensure financial capability for assured water supply purposes,
 - 2. That the applicant has constructed the requisite distribution works.
- C. The director shall determine that an applicant for a certificate of assured water supply satisfies subsection (A) of this Section with respect to the construction of any necessary treatment or storage facility if the applicant either:
 - 1. Has posted a performance bond for the entire cost of the treatment or storage facility, or
 - 2. Has built the treatment or storage facility, or

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R-12-15-708. Assured Water Supply Requirement - Ownership Interest; Change in Ownership

- A. A certificate of assured water supply or designation of assured water supply issued by the director shall be in the name of the owner of the development or municipal provider for which the application was filed.
- B. A certificate of assured water supply may not be transferred from one owner of a development to a subsequent owner, but a subsequent owner may obtain a new certificate for the development if the subsequent owner satisfies the requirements of this Section.
- C. If a person applies for a new certificate of assured water supply for a development and notifies the director in writing of the change in ownership of the development within 90 days after the change of ownership, the director shall issue the new certificate if the new owner of the development satisfies:
 - 1. Financial capability requirements for the construction of the distribution, storage, and treatment facilities effective at the time the new owner of the development applies for the new certificate;

2. Any consistency with management goal requirements in effect at the time that the initial certificate was issued for the development;
 3. The water quality requirements in effect at the time the new owner of the development applies for the new certificate;
 4. The physical availability requirements in effect at the time that the initial certificate was issued for the development, except that, where the water supply proposed is a supply other than groundwater, the new owner of the development must satisfy the requirements in effect at the time that the new owner applies for the new certificate; and
 5. The consistency with management plan requirements in effect at the time that the new owner of the development applies for the new certificate.
- D.** If the new owner of a development fails to notify the director within 90 days of obtaining ownership of the development, an application for a certificate for the development shall be reviewed under requirements in effect at the time the new owner files its application.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-709. Assured Water Supply Requirement - Review; Modification; Revocation; Prohibition on Transfer of Ground water Allocation

- A.** The director may review a certificate of assured water supply and may review or modify a designation of assured water supply at any time for good cause and may revoke a certificate or designation when an assured water supply no longer exists. Good cause shall include a merger, division of the holder of a designation of assured water supply, or a change in ownership for the holder. A subsequent owner of a designated provider shall notify the Director within 90 days of the change in ownership. The director shall review a designation of assured water supply at least every 15 years following the issuance of the designation to determine whether the designation should be modified or revoked.
- B.** With respect to revocation, the standard of review for a certificate of assured water supply shall be the standards in place at the time that the original certificate was applied for. The standard of review for the modification or revocation of a designation of assured water supply shall be the standards in place at the time of review. For the purposes of this subsection, a failure by the holder to construct any requisite treatment facilities or storage works in a timely manner shall be deemed grounds for revocation.
- C.** The holder of a designation of assured water supply may request a modification of the designation at any time. The director shall modify a designation of assured water supply if the holder presents sufficient evidence that the holder has obtained additional water supplies which satisfy the requirements of this Article.
- D.** If the director determines that there is less water in a designated provider's account established in R12-15-703(F) than the amount required for a 100-year supply for current and committed demands and projected demand for the next two calendar years, the director shall notify the designated provider and initiate a review of the designated provider's status.
- E.** The Director shall not revoke a certificate of assured water supply if any of the residential lots associated within the plat have been sold.
- F.** If a designated provider commences service to a development for which a certificate of assured water supply had been issued, the Director shall not transfer any groundwater allo-

cated pursuant to R12-15-705 from the holder of the certificate to the holder of the designation.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-710. Assured Water Supply Requirement - Notice; Objection; Hearing; Issuance of Designation of Assured Water Supply; Revocation of Certificate or Designation of Assured Water Supply; Review

- A.** The procedure for issuing a designation of assured water supply, including the procedure for notice, objection, hearing, issuance, and appeal shall be the same as the procedure established for a certificate of assured water supply in A.R.S. § 45-578. Any procedural requirement shall be undertaken in the active management area where the municipal provider serves its customers.
- B.** If the director determines that a certificate of assured water supply or a designation of assured water supply should be revoked, the director shall provide for notice, a hearing, and a review process as established in Article 2 of this Chapter.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-711. Assured Water Supply Requirement - Annual Reports

Upon obtaining a designation of assured water supply, a municipal provider shall include in its annual report required pursuant to A.R.S. § 45-632 the following information for the preceding calendar year:

1. The estimated future demand of platted, undeveloped lots which are located in the provider's service area.
2. The projected volume of water demand at build-out of customers with which the provider has entered into a notice of intent to serve agreement in the calendar year.
3. A report regarding the provider's compliance with water quality requirements.
4. The depth-to-static water level of all wells from which the provider withdrew water during the calendar year.
5. Any other information required to determine whether to continue a provider's designated status which is requested by the director.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-712. Assured Water Supply Requirement - Unplatted Development Plan; Analysis of Assured Water Supply

- A.** The director shall issue a certificate of assured water supply only to a development consisting of subdivided land.
- B.** The director may evaluate an unplatted development plan consisting of land which is not subdivided for the purpose of determining whether the development is likely to satisfy requirements established by this Article after the development is platted and divided into subdivided land.
- C.** A developer proposing to develop land which is part of an unplatted development plan may request the evaluation described in subsection (B) of this Section by submitting to the director an application for an analysis of assured water supply.
- D.** After determining that the information supplied in the application is complete, the director shall review the application and issue an analysis of assured water supply. If the director determines from evidence submitted in the application that the applicant would presently satisfy one or more of the assured water supply requirements in this Article if the development were comprised of platted, subdivided land, the director shall include a statement to such effect in the analysis of assured water supply.

- E. If the director includes within an analysis of assured water supply a determination regarding the physical availability of water for the projected 15 year groundwater demand as calculated from the projected date of application, the director shall include the determination in any calculation of the 100-year, depth-to-static water level as prescribed in R12-15-703 for certificate and designation of AWS applicants.
- F. If a developer proposes to subdivide a development for which an analysis of assured water supply has been issued under subsection (D) of this Section into platted, subdivided lands, the director shall presume that those requirements indicated in the analysis as being satisfied remain satisfied unless a change in the evidence supporting the director's determination has occurred since the application for the analysis was submitted. If a developer receives a certificate of assured water supply based in whole or in part on an analysis, the certificate shall incorporate any conditions established in the analysis.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-713. Assured Water Supply Requirement - State Land Department / General Plan, Development Plan, Secondary Plan

- A. The director shall not issue a certificate of assured water supply for land determined by the commissioner of the Arizona State Land Department to be urban land requiring a general plan, development plan, or secondary plan in accordance with A.R.S. §§ 37-332 and 37-334. A certificate of assured water supply shall be required of a subsequent purchaser only if the purchaser intends to plat and subdivide the land.
- B. To obtain a determination that state urban land for which a state general plan has been prepared in accordance with A.R.S. § 37-332 has the quality and quantity of water needed for development, the commissioner shall apply to the director for a survey of available water supplies. The application shall include portions of the information required in R12-15-702 as required by the director. The survey of available water supplies shall contain a description of the location of the land, a description of all water supplies which may be available for use on the state urban land, an estimate of the volume of each water source which may be available for use on the state urban land, a projection of the demand of the proposed use, and a description of whether each water source satisfies existing state water quality standards.
- C. To obtain a determination of whether a development or secondary plan prepared for state urban land in accordance with A.R.S. § 37-334 provides for the delivery of an assured water supply, the commissioner shall apply for an analysis of assured water supply pursuant to the applicable provisions of R12-15-712. In the commissioner's application, the commissioner shall propose a conceptual development for the state urban land. If the director determines that an assured water supply would exist for the conceptual development proposed by the commissioner in accordance with the commissioner's development or secondary plan, the director shall issue an analysis of assured water supply to the commissioner. The director's determination shall constitute a finding that the requirements of A.R.S. § 37-334 have been satisfied.
- D. If the director issues an analysis of assured water supply pursuant to subsection (C) of this Section, and a subsequent purchaser for the state land described in the analysis proposes to construct a development which satisfies the standards established in the analysis, upon application for a certificate of assured water supply, the purchaser shall receive a certificate of assured water supply without further review of the development's water use. If the development does not satisfy the standards established in the analysis, the purchaser's application

for a certificate of assured water supply shall receive full review from the director.

- E. If the commissioner of the State Land Department provides adequate evidence that a subsequent purchaser of state urban land will be provided water by a designated provider, the State Land Department shall be presumed to have met the applicable requirements of A.R.S. §§ 37-332 and 37-334 and shall be exempt from the provisions of this Section.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-714. Assured Water Supply Requirement - Fees

- A. With respect to an application listed in subsection (B) of this Section, the director shall only accept or take action on the application upon payment of the appropriate fee as listed below. Payment may be made by cash, check, or by entry in an existing department fee credit account established pursuant to R12-15-152.
- B. The following application fees shall be paid:

APPLICATION	FEE (\$)
1. Certificate of Assured Water Supply	250.00 up to 20 lots; each additional lot is 0.50; maximum of 1,000.00; subtract 20% of the original fee if consistency with goal determination unnecessary; subtract 20% of the original fee if physical availability and water quality determination unnecessary
2. Designation of Assured Water Supply	500.00, up to 500 acre-feet demand in the calendar year prior to the date of application; add 0.50 for each acre-foot between 500 and 1,000; add 0.25 for each acre-foot above 1,000, up to a maximum of 10,000.00; subtract 20% of the original fee if consistency with goal determination unnecessary; subtract 20% of the original fee if physical availability and water quality determination unnecessary
3. Designation of Assured Water Supply Modification	500.00
4. Analysis of Assured Water Supply	1,000.00
5. Physical Availability Demonstration - Undesignated Provider	1,000.00
6. Physical Availability Demonstration - Certificate of Assured Water Supply Applicant	1,000.00
7. Survey of Available Water Supplies	500.00

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-715. Definitions - Adequate Water Supply Program

In addition to any word or phrase defined or incorporated by reference in R12-15-701, the following words and phrases in R12-15-

716 through R12-15-725 shall have the following meanings, unless the context otherwise requires:

1. "AADWS applicant" means an applicant for an analysis of adequate water supply.
2. "Adequacy water report applicant" means an applicant for a water report or the applicant's proposed municipal provider.
3. "Analysis of adequate water supply" means an instrument prepared by the director in accordance with R12-15-723.
4. "Designated provider" means a municipal provider which has obtained a designation of adequate water supply.
5. "Designation of ADWS applicant" means a person applying for a designation of adequacy.
6. "Designation of adequate water supply" means a decision and order issued by the director designating a municipal provider as having an adequate water supply pursuant to A.R.S. § 45-108 and this Article.
7. "Water report" means a report prepared by the director pursuant to A.R.S. § 45-108 describing the adequacy of the water supply for a development.

Historical Head

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-716. Adequate Water Supply Requirement - Application for Water Report; Application for Designation of Adequate Water Supply; Application for Analysis of Adequate Water Supply

A. A person applying for a water report, a designation of adequate water supply, or an analysis of adequate water supply shall provide the following information on a form prescribed by the director:

1. For an application for a water report or an analysis of adequate water supply:
 - a. Name, telephone number, and address of the water report applicant or AADWS applicant. The applicant must be the owner of the subdivision for which the application is filed. If the holder of an ownership interest in the proposed development is a person other than an individual, such as a corporation, partnership, or trust, a statement naming the type of legal entity and listing the interest and extent of such interest of each principal in the entity. For purposes of this subsection (A)(1)(a), "principal" means any person or entity having a 10% or more financial interest in the development or, if the legal entity is a trust, each beneficiary of the trust holding a 10% or more beneficial interest in the development;
 - b. Name of the proposed development;
 - c. Name, address, and telephone number of the municipal provider proposed to serve the development and the applicant's technical consultant;
 - d. Number of lots or housing units projected to be located within the proposed development;
 - e. A copy of the proposed development's plat which will be submitted to the city, town, or county for approval or unplatted development plan, and a map of the proposed development which indicates the location of the proposed water distribution system and treatment works and the proposed development's geographical coordinates;
 - f. Total acreage of and size of lots in the proposed development;
 - g. The anticipated schedule for the proposed development to reach build-out and an annual projection of water demand until build-out;
 - h. Proposed water uses of the proposed development;

- i. Projected annual water demand per lot or housing unit within the proposed development at build-out for the following categories, and a schedule for completion of facilities associated with each category:
 - i. Single family housing units,
 - ii. Multifamily housing units,
 - iii. Non-residential uses,
 - iv. Other uses which impact the projected annual water demand;
- j. Information required to project annual lost and unaccounted for water associated with the proposed development;
- k. Projected average number of persons per household for the proposed development for the following categories:
 - i. Single family housing units,
 - ii. Multifamily housing units;
- l. Method of distributing water to the proposed development;
- m. A study indicating that the adequacy water report applicant's or AADWS applicant's proposed sources of water meet the requirements established in R12-15-717 and R12-15-718. If wells proposed to provide water to the development are located within one mile of a Water Quality Assurance Revolving Fund or Superfund site, or if the water supply does not currently satisfy aquifer water quality standards, the study shall include:
 - i. An identification of groundwater, if any, that does not meet state aquifer water quality standards within or adjacent to the wells proposed to provide water to the development;
 - ii. An analysis of the possible migration of groundwater that does not meet state aquifer water quality standards which may result from the proposed use;
- n. A copy of a notice of intent to serve agreement entered into between the owner of the proposed development and a municipal provider which is proposed to serve the proposed development;
- o. A copy of any agreement for the delivery of specific sources of water to the proposed development;
- p. Evidence, consistent with the requirements established in R12-15-717, of any legal right to use the proposed sources of water for the proposed development;
- q. If the municipal provider proposed to serve the proposed development is a private water company, evidence of the proposed municipal provider's certificate of convenience and necessity as approved by the Arizona Corporation Commission;
- r. A drought response plan, if required under R12-15-717.
2. For an application for a designation of adequate water supply, as applicable:
 - a. Name of the designation of ADWS applicant. The applicant must be the owner of the municipal provider. If the holder of any ownership interest in the applicant is a person other than an individual, city, or town such as a corporation, partnership, or trust, a statement naming the type of legal entity and listing the interest and the extent of such interest of each principal in the entity;
 - b. Address and telephone number of the designation of ADWS applicant and contact person;

- c. A copy of the designation of ADWS applicant's current service area map which includes the designation of ADWS applicant's current and proposed distribution system, treatment works, and storage facilities to be analyzed by the director in determining continuous availability under R12-15-703(C), and the designation of ADWS applicant's geographical coordinates;
 - d. The designation of ADWS applicant's population projection for each calendar year for 20 calendar years from the date of application;
 - e. An analysis of current and committed demands for the designation of ADWS applicant;
 - f. Information required to project annual lost and unaccounted for water associated with the activities of the designation of ADWS applicant;
 - g. Projected average number of persons per household for housing units for developments being served and proposed to be served by the designation of ADWS applicant for the following categories:
 - i. Single family housing units;
 - ii. Multifamily housing units;
 - h. A study indicating that the designation of ADWS applicant's proposed sources of water meet the requirements established in R12-15-717 and R12-15-718. If wells proposed to serve the designation of ADWS applicant's service area are located within one mile of a Water Quality Assurance Revolving Fund or Superfund site, or if the water supply does not currently satisfy aquifer water quality standards, the study shall include:
 - i. An identification of groundwater, if any, that does not meet state aquifer water quality standards within or adjacent to the wells proposed to serve the service area;
 - ii. An analysis of the possible migration of groundwater that does not meet state aquifer water quality standards which may result from the proposed use;
 - i. Evidence, consistent with the requirements established in R12-15-717, of the designation of ADWS applicant's legal right to use the proposed sources of water;
 - j. If the designation of ADWS applicant is a private water company, evidence of the applicant's certificate of convenience and necessity approved by the Arizona Corporation Commission;
 - k. A drought response plan, if required under R12-15-717.
3. Any other information prescribed by the director which is necessary to make a determination of whether an adequate water supply exists for the applicant.
 4. A sworn statement avowing that the information contained in the application is true and correct to the best knowledge of the adequacy water report applicant, AADWS applicant, or designation of ADWS applicant.
- B.** An application for a water report, a designation of adequate water supply or an analysis of adequate water supply shall be signed by:
1. The individual owner if the proposed development or private water company is owned by a sole proprietor; or
 2. An authorized corporate officer, partner, or trustee if the proposed development or private water company is owned by a corporation, partnership, or trust. If the application is submitted on behalf of a corporation, the application must also include a resolution enacted by the corporation which evidences that the person signing the application is so authorized by the corporation; or
3. A city or town manager or a person in an equivalent position if the applicant is a city or town. The application shall also include a resolution of the governing body of the city or town authorizing the city or town manager to sign the application.
- C.** A person applying for a physical availability demonstration shall submit evidence as prescribed in subsection (A) of this Section which is required by the director to determine the physical availability under R12-15-717(B) and quality of the proposed source of water under R12-15-718. After analyzing this information, the director shall provide the applicant a written determination of the proposed source of water's physical availability and quality. The demonstration may be used by any person as evidence of the physical availability and quality of those water sources described in the demonstration.
- D.** Subject to the provisions of subsection (E) of this Section, the priority date of an application for a water report, designation of adequate water supply, or analysis of adequate water supply shall be the date that a complete and correct application is filed with the Director. In the case of two or more pending, conflicting applications for a water report, designation of adequate water supply, or analysis of adequate water supply which the director determines to be complete and correct, priority shall be given to the application with the earliest priority date.
- E.** An application which the director determines to be complete and correct for a development for which a water report has previously been issued, or for which a plat was recorded prior to May 1, 1973, shall have priority among pending, conflicting applications according to the date on which the prior water report was issued, or the date on which the prior plat had been recorded prior to June 12, 1980, provided that:
1. If the development has never been determined to have an adequate or inadequate water supply, the plat which is referenced in the application has not been substantially modified since the plat was recorded.
 2. If the development has previously been issued a water report, the plat referenced in the application has not been substantially modified since the water report was issued.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-717. Adequate Water Supply Requirement-Physical Availability

- A.** The director shall approve an application for a water report or designation of adequate water supply only if the director determines that the adequacy water report applicant or designation of ADWS applicant will have sufficient supplies of groundwater, surface water, or effluent which are physically available as determined under subsection (B) of this Section, continuously available as determined under subsection (C) of this Section, and legally available under subsection (D) of this Section.
- B.** The director shall determine whether the applicant will have a sufficient supply of water which will be physically available to satisfy the applicant's 100-year projected water demand, if the applicant is an adequacy water report applicant, or will exceed the applicant's current and committed demands for 100 years, if the applicant is a designation of ADWS applicant, in accordance with the following:
1. If the proposed source is groundwater:
 - a. The director shall determine the volume of ground water which will be available for the proposed use:
 - i. If the applicant is a designation of ADWS applicant, from wells owned by the applicant which are located within the applicant's service

- area as indicated on the current service area map on the date of application and from proposed wells which the director determines are likely to be constructed for future uses by the designation of ADWS applicant within the applicant's service area.
- ii. If the applicant is an adequacy water report applicant which will be served by a central distribution system, from wells which will serve the proposed development which are located within the proposed municipal provider's service area or wells which the director determines are likely to be constructed for future uses within the service area of the proposed municipal provider.
 - iii. If the applicant is an adequacy report applicant which will not be served by a central distribution system, from wells which the director determines are likely to be constructed on individual lots.
- b. In determining the quantity of groundwater available from each well for 100 calendar years, the applicant shall submit a hydrologic study using a method of analysis approved by the director which accurately describes the hydrology of the affected area.
 - c. The director shall consider groundwater to be physically available only if the groundwater is to be withdrawn from depths not to exceed the following 100-year, depth-to-static, water level criteria:

Location of withdrawal / type of development	Maximum 100-year, depth-to-static water level
i. For areas outside of active management areas/developments other than dry lot developments	1200 feet below land surface
ii. For areas outside of active management areas/dry lot developments	400 feet below land surface
iii. For areas outside of active management areas/dry lot developments comprised of lots with an area between 36 and 160 acres	1200 feet below land surface
iv. For areas inside of active management areas / developments comprised of lots with an area between 36 and 160 acres	1000 feet below land surface

- d. The director shall determine the 100-year depth-to-static water level by adding:
 - i. The depth-to-static water level present on the date of application for the area from which groundwater withdrawals are proposed.
 - ii. The projected declines caused by existing demand, using the projected decline in the 100-year, depth-to-static water level for the area from which groundwater withdrawals are proposed to occur during the 100-year period after the date of application, calculated using records of declines for the maximum period of time for which records are available up to 25 calendar

years prior to the date of application. If evidence is provided to the director of likely changes in pumpage patterns and aquifer conditions as opposed to those patterns and conditions occur ring historically, the director may determine projected declines using a model rather than evidence of past declines.

- iii. The projected decline in the depth-to-static water level for the area from which groundwater withdrawals are proposed to occur during the 100-year period after the date of application, calculated by adding the projected groundwater demand of items in subsections (B)(1)(d)(iii)(1) and subtracting the projected demand of item in subsection (B)(1)(d)(iii)(3):
 - (1) Committed demand.
 - (2) Other lots within developments for which the director has issued an analysis of adequate water supply pursuant to R12-15-723.
 - (3) The projected demand of subdivided lots whose plats have been abandoned.
 - iv. The projected decline in depth-to-static water level for the area from which groundwater withdrawals are proposed which the director projects will result from the applicant's proposed use over a 100-year period.
 - e. The director may lower the 100-year, depth-to-static water level requirement specified in subsection (B)(1)(c), if the director determines that groundwater is available at the lower depth and the applicant demonstrates the financial capability to obtain the groundwater.
2. If the proposed source of water is surface water, other than Central Arizona Project water or Colorado River water:
 - a. The director shall determine the quantity of water annually available for the proposed use taking into consideration the priority date of the right or claim by calculating 120% of the firm yield of the proposed source from the point of diversion as limited by the capacity of the diversion works; except that, if the applicant demonstrates that it will use an alternative source of water which is physically available during times of shortage in the proposed surface water supply, the director shall determine the quantity of water annually available for the proposed use by calculating 100% of the median flow of the proposed source at the point of diversion as limited by the capacity of the diversion works.
 - b. The director shall determine the firm yield or median flow as follows:
 - i. By calculating the firm yield or median flow at the point of diversion on the basis of a minimum of 20 calendar years of flow records from the point of diversion unless 20 calendar years of records are unavailable and the director determines that a shorter period of record provides information necessary to determine the firm yield or median flow; or
 - ii. By calculating the firm yield or median flow at the point of diversion using a hydrologic model which projects the firm yield or median flow taking into account a minimum of 20 calendar years of historic river flows, changes in reservoir storage facilities, and projected changes in

- water demand. The yield available to any applicant may be composed of rights to stored water, direct diversion, or normal flow rights. If the permit for the water right was issued less than five years prior to the date of application, the director shall require the applicant to submit evidence in accordance with this subsection (B)(2)(b)(ii).
3. If the proposed source of water is Central Arizona Project water:
 - a. If an applicant has a non-declining, long-term municipal and industrial subcontract for Central Arizona Project water, the director shall calculate the quantity of water annually available for the proposed use by calculating 100% of the annual amount of water established in the subcontract.
 - b. If an applicant has a lease for Indian priority Central Arizona Project water, the director shall calculate the annual quantity of water available for the proposed use by calculating 100% of the annual amount of water established in the lease.
 - c. If an applicant has a subcontract for Central Arizona Project water other than a non-declining, long-term, municipal and industrial subcontract or a lease for Indian priority Central Arizona Project water, and the applicant demonstrates a backup supply of water, the director shall calculate the quantity of water annually available for the proposed use by calculating 100% of the annual amount of water established in the subcontract. The backup supply of water may be established with approval of the director by one or more of the following:
 - i. A drought response plan;
 - ii. Recharge credits;
 - iii. Evidence of other backup supplies which are physically, continuously, and legally available.
 - d. If the applicant does not submit evidence of sufficient backup supplies, the director shall determine the annual availability of the Central Arizona Project water supply by establishing a percentage of the annual amount established in the subcontract which the director determines to reasonably reflect the reliability of the applicant's Central Arizona Project water supply.
 4. If the proposed source of water is Colorado River water:
 - a. And the priority of the contract provides reliability equal to or better than Central Arizona Project municipal and industrial water, the director shall calculate the quantity of water annually available for the proposed use by calculating 100% of the annual amount of water established in the contract.
 - b. And the contract provides reliability which is less than Central Arizona Project municipal and industrial water, and the applicant demonstrates a backup supply of water, the director shall calculate the quantity of water annually available for the proposed use by calculating 100% of the annual amount of water set forth in the contract. The backup supply of water may be established by one or more of the following:
 - i. A drought response plan;
 - ii. Recharge credits;
 - iii. Evidence of other backup supplies which are physically, continuously, and legally available.
 - c. If the applicant does not submit evidence of sufficient backup supplies, the director shall determine the annual availability of the Colorado River water supply by establishing a percentage of the annual amount established in the contract which the director determines to reasonably reflect the reliability of the applicant's Colorado River water supply.
 5. If the proposed source of water is effluent which will be used directly:
 - a. The director shall:
 - i. Estimate the annual volume of effluent which will be available to the applicant by evaluating the current, metered production or the projected production of effluent.
 - ii. Limit the annual volume of effluent calculated to be available under subsection (B)(5)(a)(i) to the applicant's projected annual demand for the direct use of the effluent.
 - b. The applicant's proposed effluent use shall be in accordance with any water quality requirements established by the Arizona Department of Environmental Quality.
 6. If the proposed source of water is water to be recovered from a storage project:
 - a. The director shall calculate the volume of water which will be available for 100 years as represented by credits for stored water existing on the date of application in a manner consistent with the provisions of A.R.S. Title 45, Chapter 3, Articles 1 and 3.
 - b. If the applicant proposes to use credits for stored water which do not exist at the date of application, the director shall evaluate the following in determining whether to include the proposed credits in calculating the volume of the applicant's proposed supplies:
 - i. The terms of a contract to obtain water to store in a storage project.
 - ii. The physical availability, continuous availability, and legal availability of the water proposed to be stored or the in lieu water, as applicable.
 - iii. The presence of an existing storage project which will be available for use for the proposed storage.
 - iv. The existence of all required permits of an adequate duration.
 7. If an applicant proposes to recover stored water from outside the area of impact, sufficient water must exist for the withdrawals consistent with the depth limitations established in subsection (B)(1)(c).
 8. If the source of water is to be obtained through a water exchange agreement, evidence that the source of water which will be used by the adequacy water report applicant or delivered to customers of a designation of ADWS applicant will be physically available in accordance with the terms of this subsection.
- C. The director shall determine that an applicant has or will have a sufficient supply of water which will be continuously available if the applicant is an adequacy water report applicant which presents sufficient evidence that adequate delivery, storage, and treatment works will be in place in a timely manner to satisfy the 100-year projected water demand of the applicant or the applicant is a designation of ADWS applicant which presents sufficient evidence that adequate delivery, storage, and treatment works will be in place in a timely manner to exceed the applicant's current and committed demands for 100 years, and:
1. If the proposed source of water is groundwater to be withdrawn by a municipal provider, wells will be constructed

- in a timely manner within the municipal provider's service area which:
- a. Are of a capacity which exceeds the applicant's current and committed demands on a continuous basis for 100 years, if the applicant is a designation of ADWS applicant.
 - b. Are of a capacity which satisfies the applicant's 100-year projected water demand, if the applicant is an adequacy water report applicant.
2. If the proposed source of water is surface water other than Central Arizona Project water or Colorado River water, the projected volume to be diverted from the source is perennial at the point of diversion, unless the director determines that a continuous supply will exist because of one or more of the following:
 - a. Adequate storage facilities will be available to the applicant in a timely manner to store water for use when a volume of surface water is not available at the point of diversion to satisfy the applicant's water demands. For the purposes of this subsection (C)(2)(a) adequate storage facilities means:
 - i. For a designation of ADWS applicant, facilities which can store enough water to exceed the applicant's current and committed demands for the duration of an anticipated shortage.
 - ii. For an adequacy water report applicant, facilities which can store enough water to satisfy the applicant's 100-year projected water demand for the duration of an anticipated shortage.
 - b. The applicant has presented evidence of supplies of other sources of water which the director has determined will be physically, continuously, and legally available to the applicant to supplement the applicant's proposed surface water supplies.
 - c. The applicant will withdraw surface water from wells which are of a capacity:
 - i. To exceed the current and committed demands of the applicant on a continuous basis for 100 years, if the applicant is a designation of ADWS applicant.
 - ii. To satisfy the 100-year projected water demand of the applicant on a continuous basis if the applicant is an adequacy water report applicant.
 - d. The applicant has submitted a drought response plan which the director has determined will conserve an equal volume of water to the volume of water which is subject to drought.
 3. If the proposed source of water is Central Arizona Project water, the director determines that a continuous supply will exist because of one or more of the following:
 - a. Adequate storage facilities will be available to the applicant in a timely manner to store water when a volume of Central Arizona Project water is not available to meet the applicant's water demands. For the purposes of this subsection (C)(3)(a), adequate storage facilities means:
 - i. For a designation of ADWS applicant, facilities which can store enough water to exceed the applicant's current and committed demands for the duration of an anticipated shortage.
 - ii. For an adequacy water report applicant, facilities which can store enough water to satisfy the applicant's 100-year projected water demand for the duration of an anticipated shortage.
 - b. The applicant has presented evidence of supplies of other sources of water which the director has determined will be physically, continuously, and legally available to the applicant to supplement the proposed Central Arizona Project water supplies.
 4. If the proposed source of water is Colorado River water, the director determines that a continuous supply will exist because of one or more of the following:
 - a. Adequate storage facilities will be available to the applicant in a timely manner to store water when a volume of Colorado River water is not available to meet the applicant's water demands. For the purposes of this subsection (C)(4)(a), adequate storage facilities means:
 - i. For a designation of ADWS applicant, facilities which can store enough water to exceed the applicant's current and committed demands for the duration of an anticipated shortage.
 - ii. For an adequacy water report applicant, facilities which can store enough water to satisfy the applicant's 100-year projected water demand for the duration of an anticipated shortage.
 - b. The applicant has presented evidence of supplies of other sources of water which the director has determined will be physically, continuously, and legally available to the applicant to supplement the proposed Colorado River water supplies.
 - c. The applicant has submitted a drought response plan which the director has determined will conserve an equal volume of water to the volume of water which is subject to drought.
 5. If the proposed source of water is effluent, the applicant presents evidence that:
 - a. If the applicant is a designation of ADWS applicant, the applicant's ability to exceed the applicant's current and committed demands for 100 years which are to be satisfied with effluent will not be affected by fluctuations in the supply of effluent.
 - b. If the applicant is an adequacy water report applicant, the applicant's ability to satisfy the applicant's 100-year projected water demand which is to be satisfied with effluent will not be affected by fluctuations in the supply of effluent.
 6. If the applicant will obtain the proposed source of water through a water exchange agreement, evidence that the source of water which the applicant or the applicant's customers will use will be continuously available in accordance with the provisions of this subsection.
- D.** The director shall determine that an applicant will have sufficient supplies of water which will be legally available to the applicant to satisfy the applicant's 100-year projected water demand, if the applicant is an adequacy water report applicant, or will exceed the applicant's current and committed demands for 100 years, if the applicant is a designation of ADWS applicant, in accordance with the following:
1. If the proposed source of water is surface water, other than Central Arizona Project water or Colorado River water:
 - a. The applicant shall submit the following evidence:
 - i. Evidence that the applicant has a certificated surface water right, decreed water right, or a pre-1919 claim for the proposed source, or evidence that the applicant is not the holder of a water right but receives water pursuant to a

- If the certificated surface water right or decreed water right pre-dates the date of application by at least five years, or the applicant submits a pre-1919 claim, evidence that the surface water supply has been used pursuant to the applicable water right or claim within the five years prior to the date of application, evidence that a court has determined that the right has not been abandoned, or evidence that the non-use would not have resulted in an abandonment of the right pursuant to A.R.S. § 45-189.
 - b. And the applicant presents evidence of a certificated surface water right, a decreed water right, or a pre-1919 claim, the director shall determine that the volume of water which is legally available pursuant to the applicant's water right or claim is equal to the face value of the right or claim. If the right or claim is subsequently adjudicated, the director shall determine the volume of water which is legally available based on the adjudicated amount of water.
2. If the proposed source of water is Central Arizona Project water, evidence that the applicant has entered into a subcontract with a multi-county water conservation district for the proposed volume of Central Arizona Project water. The director shall presume that a 50 year long-term, non-declining municipal and industrial subcontract is sufficient evidence of the legal availability to the applicant of the volume of Central Arizona Project water specified in the subcontract for 100 calendar years.
3. If the proposed supply of water is Colorado River water, evidence that the applicant has a contract with the United States Secretary of the Interior for the proposed supply.
4. If the proposed source of water is effluent, evidence that the applicant has the legal right to use, recapture, or reuse the effluent.
5. If the applicant will obtain the proposed source of water through a written contract other than a water exchange agreement, a contract between an adequacy water report applicant and the municipal provider proposed to serve the applicant, a contract with the United States Secretary of the Interior for Colorado River water, or a subcontract with a multi-county water conservation district, the director shall determine whether the proposed source of water is legally available to the applicant, the term of years for which the source is legally available, and the volume of water which is legally available as follows:
 - a. The director shall determine that the proposed source of water is legally available to the applicant only if:
 - i. The person providing the water under the contract has a legal right to the water in accordance with the terms of this subsection.
 - ii. The director determines that the terms of the contract will ensure that the proposed source of water will be delivered to the applicant.
 - b. The director shall determine the term of years for which the proposed source of water is legally available based on the term of years remaining in the contract.

- A. To determine compliance with the requirements established in subsections (B), (C), and (D) of this Section, the director shall maintain a record, updated annually, of the total water supply and demand status for each holder of a water report and designation of adequate water supply.
- B. The director shall make an initial determination that an adequacy water report applicant or a designation of ADWS applicant satisfies the requirements established in subsections (B), (C), and (D) of this Section if the director determines that:
 1. For an adequacy water report applicant, the volume of the applicant's proposed supply of water which the director determines to be physically, continuously, and legally available in accordance with the provisions of this Section is equal to or exceeds the volume of the applicant's 100-year projected water demand.
 2. For a designation of ADWS applicant, the volume of the applicant's proposed supply of water which the director

- A. If the applicant has entered into a notice of intent to serve agreement signed by both the applicant and the municipal provider proposed to serve the applicant, which contains a statement of the municipal provider's intent to serve all of the proposed lots and uses that are subject to this determination of an adequate water supply.
7. If the applicant is an adequacy water report applicant, and the municipal provider proposed to serve the applicant is a city or town, the applicant has submitted evidence indicating that the applicant is located within the incorporated limits of the city or town or the applicant has submitted evidence of the legal right of the city or town to serve water to the applicant outside the city or town's incorporated limits.
8. If the applicant is an adequacy water report applicant, and the municipal provider proposed to serve the applicant is a private water company, the applicant has submitted evidence:
 - a. Of the private water company's certificate of convenience and necessity approved by the Arizona Corporation Commission. The director shall only determine that the water provided by the private water company is legally available if the certificate of convenience and necessity is free of conditions which would likely result in the revocation of the certificate of convenience and necessity; and
 - b. That the applicant is located within the certificated area or within any other area in which the Arizona Corporation Commission authorizes the private water company to serve water.
9. If the applicant is a private water company applying for a designation of adequate water supply, evidence that the applicant has a certificate of convenience and necessity approved by the Arizona Corporation Commission authorizing the proposed water use.
10. If the applicant will obtain the proposed source of water through a water exchange agreement, evidence that the applicant's water exchange agreement satisfies the requirements of A.R.S. Title 45.
11. If the director can only determine the proposed source of water to be physically available under this Section because of the use of storage facilities by the applicant, evidence of the applicant's legal right to store water in the facilities.

- E. To determine compliance with the requirements established in subsections (B), (C), and (D) of this Section, the director shall maintain a record, updated annually, of the total water supply and demand status for each holder of a water report and designation of adequate water supply.
- F. The director shall make an initial determination that an adequacy water report applicant or a designation of ADWS applicant satisfies the requirements established in subsections (B), (C), and (D) of this Section if the director determines that:
 1. For an adequacy water report applicant, the volume of the applicant's proposed supply of water which the director determines to be physically, continuously, and legally available in accordance with the provisions of this Section is equal to or exceeds the volume of the applicant's 100-year projected water demand.
 2. For a designation of ADWS applicant, the volume of the applicant's proposed supply of water which the director

determines to be physically, continuously, and legally available in accordance with the provisions of this Section exceeds the volume of the applicant's current and committed demands for 100 years.

- G. To determine the volume of the supply of surface water and effluent which is physically, continuously, and legally available for an applicable period of years, the director will multiply the number of years in that period by the annual volume of those sources of water which the director determines to satisfy the requirements of this Section.
- H. After the director calculates the volume of water, from any source, which a holder of the designation of adequate water supply has proven to satisfy the requirements of this Section, the director shall annually subtract from the volume attributed to groundwater and credits for stored water the volume of groundwater and credits for stored water which the holder of the designation uses each calendar year.
- I. For a holder of a designation whose designation has been modified under R12-15-720 that calendar year, the director shall add any additional volume of water, from any source, which the director determines is physically, continuously, and legally available for the proposed use.
- J. The director shall determine that a holder of a designation is no longer in compliance with the requirements established in this Section if the holder of the designation no longer has a physically, continuously, and legally available volume of water, from any source which exceeds the holder's current and committed demands for 100 years.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-718. Adequate Water Supply Requirement-Water Quality

- A. The director shall approve an application for a water report or designation of adequate water supply only if the applicant submits information from which the director determines that the applicant's proposed water sources will satisfy existing state water quality requirements and any other water quality standards which are effective on the date of application and which are applicable to the proposed water use after any required treatment.
- B. In making the determination described in subsection (A) of this Section, the director may consider expected changes in the quality of the proposed sources of water, including the migration of poor quality groundwater.
- C. The director shall establish as a condition for a designation of adequate water supply that the municipal provider shall satisfy any state water quality requirements established for the applicant's proposed use after the date of designation. If the municipal provider fails to satisfy this condition, the director may terminate the designation of adequate water supply after consultation with the director of the Arizona Department of Environmental Quality.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-719. Adequate Water Supply Requirement - Ownership Interest

A designation of adequate water supply issued by the director shall be in the name of the owner of the municipal provider for which the application was filed. Any water report provided to the Arizona Department of Real Estate shall be in the name of the owner of the development for which the application is filed.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-720. Adequate Water Supply Requirement - Review; Modification; Revocation

- A. The director may review or modify a designation of adequate water supply at any time for good cause and may revoke a designation when an adequate water supply no longer exists. Good cause shall include a merger, division of the holder of a designation of adequate water supply, or a change in ownership of the holder. A subsequent owner of a designated provider shall notify the Director within 90 days of the change in ownership. The director shall review a designation of adequate water supply at least five years following the effective date of this Article to determine whether the designation should be modified or revoked. After the initial review, the director shall review the designated provider's status every 15 years. The standard of review for the modification or revocation shall be the standards in place at the time of the review. The director shall notify the holder of a designation of adequate water supply prior to reviewing the holder's designation.
- B. The holder of a designation of adequate water supply may request a modification of the designation at any time. The director shall modify a designation of adequate water supply if the holder presents sufficient evidence that the holder has obtained additional water supplies which satisfy the requirements of this Article.
- C. If the director determines that there is less water in a designated provider's account established in R12-15-717(E) than the amount required for a 100-year supply for current and committed demands and projected demands for the next two calendar years, the director shall notify the designated provider and initiate a review of the designated provider's status.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-721. Adequate Water Supply Requirement - Notice; Objection; Hearing; Issuance of Designation of Adequate Water Supply; Revocation of Designation of Adequate Water Supply; Review

- A. The director may require notice and a hearing prior to approving or rejecting an application for a water report or a designation of adequate water supply. If the director determines that notice and a hearing should be held, the procedure for notice, objection, hearing, issuance, and appeal shall be the same as that established for a certificate of assured water supply in A.R.S. § 45-578. Any procedural requirement shall be performed in the county where the development is proposed to be located or where the municipal provider serves its customers.
- B. The grounds for objection are limited to whether the water report application or the designation of adequate water supply application satisfy the criteria for determining an adequate water supply as set forth in this Article.
- C. If the director determines that a designation of adequate water supply should be revoked, the director shall provide for notice, a hearing, and a review process as established in Article 2 of this Chapter.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-722. Adequate Water Supply Requirement - Annual Reports

Beginning the calendar year following the issuance of a designation of adequate water supply or, if a provider is designated on the effective date of this Article, beginning the calendar year three years subsequent to the effective date of this Article, a municipal provider shall submit to the director by March 31 of each calendar year thereafter an annual report for the preceding calendar year describing the information prescribed in R12-15-711 of this Article. In

addition to this information, the provider shall submit information concerning the volume of water from each source withdrawn, diverted, or received for delivery to its customers.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-723. Adequate Water Supply Requirement - Master Plan Communities and Unplatted Development Plans; Analysis of Adequate Water Supply

- A. The director shall issue a water report only to a development consisting of subdivided or unsubdivided land.
- B. The director may evaluate an unplatted development plan consisting of land which is neither subdivided nor unsubdivided for the purpose of determining whether the development is likely to satisfy requirements established by this Article after the development is platted and divided into subdivided or unsubdivided land.
- C. A developer proposing to develop land which is part of an unplatted development plan may request the evaluation described in subsection (B) of this Section by submitting to the director an application for an analysis of adequate water supply.
- D. After determining that the information supplied in the application is complete, the director shall review the application and issue an analysis of adequate water supply. If the director determines from evidence submitted in the application that the applicant would presently satisfy one or more of the adequate water supply requirements of this Article if the development were comprised of platted, subdivided, or unsubdivided land, the director shall include a statement to such effect in the analysis of adequate water supply.
- E. If the director includes within an analysis of adequate water supply a determination regarding the physical availability of water for the projected 15 year groundwater demand as calculated from the projected date of application, the director shall include the determination in any calculation of the 100-year, depth-to-static water level as prescribed in R12-15-717 for adequacy water report or designation of ADWS applicants.
- F. If a developer proposes to divide a development for which an analysis of adequate water supply has been issued under subsection (D) of this Section into platted, subdivided, or unsubdivided lands, the director shall presume that those requirements indicated in the analysis as being satisfied remain satisfied unless a change in the evidence supporting the director's determination has occurred since the application for the analysis was submitted.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-724. Adequate Water Supply Requirement-State Land Department/General Plan, Development Plan, Secondary Plan

- A. The director shall not issue a water report for land determined by the commissioner of the Arizona State Land Department to be urban land requiring a general plan, development, or secondary plan in accordance with A.R.S. §§ 37-332 and 37-334. A water report shall be required of a subsequent purchaser only if the purchaser intends to plat and subdivide the land.
- B. To obtain a determination that state urban land for which a state general plan has been prepared in accordance with A.R.S. § 37-332 has the quality and quantity of water needed for development, the commissioner shall apply to the director for a survey of available water supplies. The application shall include portions of the information required in R12-15-716 as required by the director. The survey of available water supplies shall contain a description of the location of the land, a description of all water supplies which may be available for

use on the state urban land, an estimate of the volume of each water source which may be available for use on the state urban land, a projection of the demand of the proposed use, and a description of whether the water source satisfies existing state water quality standards.

- C. To obtain a determination of whether a development or secondary plan prepared for state urban land in accordance with A.R.S. § 37-334 provides for the delivery of an adequate water supply, the commissioner shall apply for an analysis of adequate water supply pursuant to the applicable provisions of R12-15-723. In the commissioner's application, the commissioner shall propose a conceptual development for the state urban land. If the director determines that an adequate water supply would exist for the conceptual development proposed by the commissioner in accordance with the commissioner's development or secondary plan, the director shall issue an analysis of adequate water supply to the commissioner. The director's determination shall constitute a finding that the requirements of A.R.S. § 37-334 have been satisfied.
- D. If the director issues an analysis of adequate water supply pursuant to subsection (C) of this Section, and a subsequent purchaser for the state land described in the analysis proposes to construct a development which satisfies the standards established in the analysis, upon application for a water report, the purchaser shall receive a report without further review of the development's water use. If the development does not satisfy the standards established in the analysis, the purchaser's application for a water report shall receive full review from the director.
- E. If the commissioner of the State Land Department provides adequate evidence that a subsequent purchaser of state urban land will be provided water by a designated provider, the State Land Department shall be presumed to have met the applicable requirements of A.R.S. §§ 37-332 and 37-334 and shall be exempt from the provisions of this Section.

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

R12-15-725. Adequate Water Supply Requirement - Fees

- A. With respect to an application listed in subsection (B) of this Section, the director shall only accept or take action on the application upon payment of the appropriate fee as listed below. Payment may be made by cash, check, or by entry in an existing department fee credit account established pursuant to R12-15-152.
- B. The following application fees shall be paid:

APPLICATION	FEE (\$)
1. Water Report	200.00 up to 20 lots; each additional lot is 0.50; maximum of 800.00; subtract 20% of the original fee if physical availability and water quality determination unnecessary
2. Designation of Adequacy	400.00, up to 1,000 acre-feet of demand in the calendar year prior to the date of application; add 0.25 for each acre-foot above 1,000, maximum of 8,000.00; subtract 20% of the original fee if physical availability and water quality determination unnecessary
3. Modification of Designation of Adequacy	500.00
4. Analysis of Adequate Water Supply	1,000.00

5. Physical Availability Demonstration - Undesignated Provider	1,000.00
6. Physical Availability Demonstration - Water Report Applicant	1,000.00
7. Survey of Available Water Supplies	500.00

Historical Note

Adopted effective February 7, 1995 (Supp. 95-1).

ARTICLE 8. WELL CONSTRUCTION AND LICENSING OF WELL DRILLERS

R12-15-801. Definitions

In addition to the definitions set forth in A.R.S. §§ 45-101, 45-402, and 45-591 and in R12-15-202, the following words and phrases in this Article shall have the following meanings, unless the context otherwise requires:

1. "Annular space" means the space between the outer well casing and the borehole wall. An annular space also means the space between an inner well casing and outer well casing.
2. "Aquifer" means an underground formation capable of yielding or transmitting usable quantities of water.
3. "Artesian aquifer" means an aquifer which is overlain by a confining formation and which contains groundwater under sufficient pressure for the water to rise above the top of the aquifer.
4. "Artesian well" means a well that penetrates an artesian aquifer.
5. "Bentonite" means a colloidal clay composed mainly of sodium montmorillonite, a hydrated aluminum silicate.
6. "Cap" means a tamper-resistant, watertight steel plate of at least one-quarter inch thickness on the top of all inside and outside casings of a well.
7. "Casing" means the tubing or pipe installed in the borehole during or after drilling to support the sides of the well and prevent caving.
8. "Confining formation" means the relatively impermeable geologic unit immediately overlying an artesian aquifer.
9. "Consolidated formation" means a naturally occurring geologic unit through or into which a well is drilled, having a composition, density, and thickness which will provide a natural hydrologic barrier.
10. "Department" means the Arizona Department of Water Resources.
11. "Director" means the Director of the Arizona Department of Water Resources.
12. "Drilling card" means a card which is issued by the Director to the well drilling contractor or single well licensee designated in the notice of intent or permit, authorizing the well drilling contractor or licensee to drill the specific well or wells in the specific location as noticed or permitted.
13. "Exploration well" means a well drilled in search of geophysical, mineralogical or geotechnical data.
14. "Flowing artesian well" means an artesian well in which the pressure is sufficient to cause the water to rise above the land surface.
15. "Grout" or "cement grout" means cement mixed with no more than 50% sand by volume, and containing no more than six gallons of water per 94 pound sack of cement.
16. "Mineralized water" means any groundwater containing over 3000 milligrams per liter (mg/l) of total dissolved solids or containing any of the following chemical constituents above the indicated concentrations:

Constituent	Concentration (mg/l)
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium (total)	0.05
Fluoride	4.0
Lead	0.05
Mercury	0.002
Nitrate (as N)	10.0
Selenium	0.01
Silver	0.05
17. "Monitor well" means a well designed and drilled for the purpose of monitoring water quality within a specific depth interval.
18. "Open well" means a well which is not equipped with either a cap or a pump.
19. "Perforations" means a series of openings in a casing, made either before or after installation of the casing, to permit the entrance of water into the well.
20. "Piezometer well" means a well that is designed and drilled for the purpose of monitoring water levels within a specific depth interval.
21. "Pitless adaptor" means a commercially manufactured watertight unit or device designed for attachment to a steel well casing which permits discharge from the well below the land surface and allows access into the well casing while preventing contaminants from entering the well.
22. "Polluted water" means water whose chemical, physical, biological, or radiological integrity has been degraded through the artificial or natural infusion of chemicals, radionuclides, heat, biological organisms, or mineralogical or other extraneous matter.
23. "Pressure grouting" means a process by which a grout is confined within the borehole or casing of a well by the use of retaining plugs, packers, or a displacing fluid by which sufficient pressure is applied to drive the grout into and within the annular space or interval to be grouted.
24. "Qualifying party" means a partner, officer, or employee of a well drilling contractor, who has significant supervisory responsibilities and who has been designated to take the licensing examination for that well drilling contractor.
25. "Single well license" means a license issued to a person which allows the drilling or modification of a single exempt well on land owned by that person.
26. "Vadose zone well" means a well constructed in the interval between the land surface and the top of the static water level.
27. "Vault" means a tamper-resistant watertight structure used to complete a well below the land surface.
28. "Well abandonment" means the modification of the structure of a well by filling or sealing the borehole so that water may not be withdrawn or obtained from the well.
29. "Well drilling" means the construction or repair of a well, or the modification, except for abandonment, of a well, regardless of whether compensation is involved, including any deepening or additional perforating, any addition of casing or change to existing casing construction, and any other change in well construction not normally associated with well maintenance, pump replacement, or pump repair.

30. "Well drilling contractor" means an individual, public or private corporation, partnership, firm, association, or any other public or private organization or enterprise that holds a well driller's license pursuant to A.R.S. § 45-595(B).

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended effective June 18, 1990 (Supp. 90-2).

R12-15-802. Scope of Article

This Article shall apply to man-made openings in the earth through which water may be withdrawn or obtained from beneath the surface of the earth, including all water wells, monitor wells and piezometer wells. It shall also apply to geothermal wells to the extent provided by A.R.S. § 45-591.01, and all exploration wells and grounding or cathodic protection holes greater than 100 feet in depth. However, this Article shall not apply to the following:

1. Man-made openings in the earth not commonly considered to be wells, such as construction and mining blast holes, underground mines and mine shafts, open pit mines, tunnels, septic tank systems, caissons, basements, and natural gas storage cavities.
2. Injection wells and vadose zone wells which are subject to regulation by the Arizona Department of Environmental Quality.
3. Oil, gas, and helium wells drilled pursuant to the provisions of A.R.S. Title 27.
4. Drilled boreholes in the earth less than 100 feet in depth which are made for purposes other than withdrawing or encountering groundwater, such as exploration wells and grounding or cathodic protection holes; except that in the event that groundwater is encountered in the drilling of a borehole, this Article shall apply.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended effective June 18, 1990 (Supp. 90-2).

R12-15-803. Well drilling and abandonment requirements; licensing and supervision requirements

- A. A person shall not drill or abandon a well, or cause a well to be drilled or abandoned, in a manner which is not in compliance with A.R.S. Title 45, Chapter 2, Article 10, and the rules adopted thereunder.
- B. A person, other than a single well licensee or a bona fide employee of a well drilling contractor, shall not engage in well drilling or abandonment without first securing a well drilling license in accordance with R12-15-804, R12-15-805 and R12-15-806.
- C. A qualifying party of a well drilling contractor shall provide direct and personal supervision of the contractor's employees to ensure that all wells are constructed and abandoned in accordance with this Article.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Section 12-15-803 amended and the text of former Section R12-15-804 renumbered to subsections (B) and (C) and amended effective June 18, 1990 (Supp. 90-2).

R12-15-804. Application for well drilling license

- A. An applicant for a well drilling license shall submit a verified application of a form prescribed and furnished by the Director which contains the following information:
 1. A designation of the classification of license sought by the applicant.
 2. If the applicant is an individual, the individual's name, address and telephone number.

3. If the applicant is a partnership, the names, addresses, and telephone numbers of all partners, with a designation of any limited partners.
4. If the applicant is a corporation, association or other organization, the names, addresses and telephone numbers of the directors and of the president, vice president, secretary and treasurer, or the names, addresses and telephone numbers of the functional equivalent of such officers.
5. The address or location of the applicant's place of business, the mailing address if it is different from the applicant's place of business, and if applicant is a corporation, the state in which it is incorporated.
6. The name, address and telephone number of each qualifying party, the qualifying party's relationship to the applicant, and a detailed history of each qualifying party's supervisory responsibilities and well drilling experience, including previous employers, job descriptions, duties and types of equipment utilized.
7. The names, addresses and telephone numbers of three persons not members of each qualifying party's immediate family, who can attest to each qualifying party's good character and reputation, experience in well drilling, and qualifications for licensing.
8. Such additional information relevant to the applicant's or qualifying party's experience and qualifications in well drilling as the Director may require.

- B. An applicant shall notify the Director in writing of any change in the information contained in the application within 30 days after such change.
- C. The Director shall not issue a license under this Article if the applicant or a qualifying party lacks good character and reputation.
- D. Prior to the issuance of a license, a qualifying party shall demonstrate three years of experience, dealing specifically with the type of drilling for which the applicant is applying for a license. This experience requirement may be reduced if the Director finds that the qualifying party has clearly and convincingly demonstrated a high degree of understanding and knowledge of well drilling techniques for the type of drilling for which the applicant is applying for a license. In no case, however, shall the practical experience requirement be less than two years.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Former Section R12-15-804 renumbered to R12-15-803(B) and (C), new Section R12-15-804 adopted effective June 18, 1990 (Supp. 90-2).

R12-15-805. Examination for well drilling license

- A. The Director shall offer an examination for a well drilling license no less than six times yearly. The examination shall be administered to those eligible applicants whose applications were submitted at least 20 days prior to the date of the examination. The examination shall consist of a section on legal requirements, a section on general knowledge and one or more of six specialized sections. The section on legal requirements shall test the qualifying party's knowledge of A.R.S. Title 45, Chapter 2, Article 10, and the rules adopted thereunder. The section on general knowledge shall test the qualifying party's knowledge of general hydrologic concepts, principles, and practices in the well construction industry, and shall test knowledge of groundwater protection, pollution, water quality and public health effects. The specialized sections shall test the qualifying party's knowledge in the following classifications:
 1. Cable tool drilling in rock and unconsolidated material.
 2. Air rotary drilling in rock and unconsolidated material.

3. Mud rotary drilling in rock and unconsolidated material.
 4. Reverse rotary drilling in rock and unconsolidated material.
 5. Jetting and driving wells in unconsolidated material.
 6. Boring and augering in unconsolidated material.
- B.** Only the qualifying party, department personnel, and persons having the express permission of the Director shall be permitted in the examination room while the examination is in progress. The qualifying party shall not bring books or notes into the examination room, or communicate by any means whatsoever while the examination is in progress without the express permission of the presiding examiner. The qualifying party shall not leave the examination room while the examination is in progress without first obtaining the permission of the presiding examiner. The Director may disqualify an applicant for violation of this subsection.
- C.** To obtain a well drilling license, a qualifying party of the applicant shall pass the section on legal requirements, the section on general knowledge, and one or more specialized sections. Each section of the examination shall be graded separately. The passing grade on each section shall be 70 percent.
- D.** No person may take the examination more than twice during any 12 months.
- E.** The Director may exempt a qualifying party from taking the section on general knowledge, and one or more of the specialized sections, if the qualifying party provides proof of passing an equivalent examination given by the National Water Well Association.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Section repealed, new Section adopted effective June 18, 1990 (Supp. 90-2).

R12-15-806. License fee; issuance and term of licenses; renewal; display of license

- A.** The fee for a well driller's license shall be fifty dollars. No additional fee shall be charged for amendments to licenses pursuant to subsection (B).
- B.** Upon submittal of the license fee and satisfactory completion of an examination, the Director shall issue the applicant a well drilling license. The license shall be numbered and shall state the specialized classifications of drilling activities for which the applicant is qualified and licensed. The applicant shall be licensed in only those classifications for which the qualifying party has passed the specialized sections of the examination. If the qualifying party subsequently passes other specialized sections, the applicant's license shall be amended.
- C.** A well drilling contractor shall notify the Director in writing within 30 days of the date on which the well drilling contractor no longer has a qualifying party for one or more of its specialized drilling classifications. Upon such notification, the Director may revoke or suspend part or all of the well drilling license of the well drilling contractor and require a new qualifying party to take and pass the examination.
- D.** A well drilling license shall expire each year on June 30th, unless renewed pursuant to subsection (E).
- E.** A person may renew a well drilling license by submitting an application for renewal on forms prescribed and furnished by the Director. The renewal fee shall be ten dollars. If the application and renewal fee are postmarked on or before June 30, the well drilling contractor may operate as a licensee until actual issuance of the renewal license. A license which has expired may be reactivated and renewed within one year of its expiration by filing the required application and 20 dollars. If a license has been expired for one or more years for failure to

renew, the well drilling contractor shall apply for a new license and repeat the examination.

- F.** A well drilling contractor shall prominently display the well drilling license number on all well drilling rigs owned or operated by the contractor in this state. Good quality paint or commercial decal numbers shall be used in placing each identification number on the drilling rig. The license number shall not be inscribed in crayon, chalk, pencil, or other temporary markings.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended effective June 18, 1990 (Supp. 90-2).

R12-15-807. Single well license

- A.** An applicant for a single well license pursuant to A.R.S. § 45-595(D) shall submit a verified application on forms prescribed and furnished by the Director, which shall include:
1. The name and address of the applicant.
 2. The location of the well and whether the applicant owns the land.
 3. The type of drill rig to be used and the owner of the rig.
 4. The proposed design of the well or method of abandonment.
 5. The names of any people who will be assisting the applicant in the drilling or abandonment of the well, and whether the applicant will compensate them for their efforts.
 6. The applicant's experience, if any, in well drilling or abandonment.
 7. Such other information as the Director may require relevant to the applicant's experience and qualifications in well drilling or abandonment.
- B.** The Director shall offer the single well examination no less than six times yearly and shall administer the examination to those eligible applicants whose applications were submitted at least 20 days prior to the date of the examination.
- C.** The single well examination shall be of a form prescribed and furnished by the Director and shall test the applicant's knowledge of abandonment techniques, or those minimum well construction requirements and drilling techniques applicable to the proposed design of the well. The passing grade on the sections of the examination dealing with construction requirements and drilling techniques, respectively, shall be 70 percent.
- D.** Rule R12-15-805 relating to testing procedures shall be fully applicable.
- E.** Applicants who twice fail the examination shall wait a minimum of 90 days before re-testing.
- F.** Upon passing the examination, the applicant shall be issued a single well license, authorizing the applicant to drill or abandon one exempt well at the location specified in the application. The license shall be valid for a period of one year from issuance.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended effective June 18, 1990 (Supp. 90-2).

R12-15-808. Revocation of license

The Director may revoke, suspend, or place on probationary status a well drilling license issued pursuant to R12-15-806, or a single well license, for good cause, including:

1. Intentionally making a misstatement of fact on any filing with the Department.
2. Violating any provision of A.R.S. Title 45, Chapter 2, Article 10, and the rules promulgated thereunder, or aiding and abetting in such a violation.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended effective June 18, 1990 (Supp. 90-2). Section number corrected (Supp. 93-1).

R12-15-809. Notice of intention to drill

A notice of intention to drill required to be filed pursuant to A.R.S. § 45-596 shall be signed by the owner or lessee of the property upon which the well is to be drilled.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2).

R12-15-810. Authorization to drill

- A. The Director shall, upon mailing a duplicate copy of the notice of intention to drill as provided in A.R.S. § 45-596(D), mail a drilling card to the designated well drilling contractor or single well licensee.
- B. A well drilling contractor or single well licensee may commence drilling a well only if the well drilling contractor or licensee has possession of a drilling card at the well site issued by the Director in the name of the well drilling contractor or licensee, authorizing the drilling of the specific well in the specific location.
- C. In extraordinary situations not requiring a permit but only a notice of intention to drill, the Director may grant a request by telephone for emergency authorization of commencement of drilling prior to the actual receipt by the well driller of the drilling card. Within seventy-two hours after such a request is granted, the well driller shall file a written statement indicating the nature and reasons for the request, and the date, time and Department employee granting the request, and the well owner shall file a notice of intent to drill if such a notice has not previously been filed.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended effective June 18, 1990 (Supp. 90-2). Amended to correct typographical error under A.A.C. R1-1-109 (Supp. 01-2).

R12-15-811. Minimum well construction requirements

- A. Well casing
 1. Casing shall be of a sufficient strength and wall thickness to hold the borehole open and survive any necessary grouting. A person shall use only steel or thermoplastic casing in the construction of a well, unless the person has received a variance from the Director pursuant to R12-15-820. The well casing or an extension of the casing shall extend a minimum of one foot above ground level. When installing a pitless adaptor, the casing may be terminated below ground level for aesthetic reasons or freeze protection purposes. Casing made of, or which has been exposed to, hazardous or potentially harmful materials, such as asbestos, shall not be used.
 2. All well casing joints or overlaps shall be made watertight to prevent the degradation of the water supply by the migration of inferior quality water. Except as provided in subsection (H) of this rule, any openings in the casing that will be above the water level in the well, such as bar holes, cracks or perforations, shall be completely plugged or sealed.
 3. Thermoplastic casing shall be installed only in an over sized drillhole without driving. Thermoplastic casing shall conform with American Society for Testing and Materials Standard Specification F480-89 (1989), which is incorporated herein by reference and is on file with the Office of the Secretary of State. Rivets or screws used in the casing joints shall not penetrate the inside of the casing.

4. Steel casing shall be new or in like-new condition, free from pits or breaks, and shall conform with American Society for Testing and Materials Standard Specification A53-89a (1989), A139-89b (1989) or A312/A312M-89a (1989), whichever is applicable, all of which are incorporated herein by reference and are on file with the Office of the Secretary of State.
5. Copies of The American Society for Testing and Materials standard specifications referred to in subsections (3) and (4) above may be obtained with these rules at the Office of the Secretary of State of the State of Arizona, State Capitol, West Wing, Phoenix, Arizona 85007; from the Department of Water Resources, Operations Division, 15 South 15th Avenue, Phoenix, AZ 85007; and from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103. This rule does not include any later amendments or editions of those standard specifications.

B. Surface seal

1. Except as provided in subsections (2) and (4) of this subsection, and R12-15-817(B)(1), all wells shall be constructed with a surface seal as herein provided. The seal shall consist of steel casing, one foot of which shall extend above ground level, and cement grout placed in one continuous application from the bottom of the zone to be grouted to the land surface. If a pitless adaptor is utilized, the cement grout may terminate at the bottom of the pitless adaptor. The minimum length of the steel casing shall be 20 feet. The minimum annular space between the casing and the borehole for placement of grout shall be one and one-half inches. Curing additives, such as calcium chloride, shall not exceed ten percent of the total volume of grout. Bentonite as an additive shall not exceed five percent of the total volume. The minimum length of the surface seal shall be 20 feet. Any annular space between the outer casing and an inner casing shall be completely sealed to prevent contamination of the well.
2. All hand-dug wells shall be constructed with a watertight curbing extending, at a minimum, from one foot above the natural ground level to the static water level, or into the confining formation if the aquifer is artesian. The curbing shall consist of poured cement grout or casing surrounded by cement grout. Concrete block with cement grout and rock with cement grout may also be used. The poured cement grout shall not be less than six inches thick. If casing is to be used, the minimum annular space between the casing and the borehole shall be three inches. Hand-dug wells shall be sealed at the surface with a watertight, tamper-resistant cover to prevent contaminants from entering the well.
3. All wells constructed by jetting or driving shall have cement grout placed in the annular space to a minimum depth of six feet. The minimum annular space between the casing and the borehole for placement of the grout shall be one and one-half inches.
4. All horizontal wells, to prevent leakage, shall be constructed with a surface seal consisting of steel casing and cement grout extending a minimum of ten feet into the land surface.

C. Access port. Every well with casing four inches in diameter or larger shall be equipped with a functional watertight access port with a minimum diameter of one-half inch so that the water level or pressure head in the well can be monitored at all times.**D. Gravel packed wells**

1. If a gravel pack has been installed, the annular space between the outer casing and the inner casing shall be sealed, either by welding a cap at the top or by filling with cement grout from the bottom of the outer casing to the surface.
2. If a gravel tube is installed, it shall be sealed with a cap.
- E. Vents.** All vents installed in the well casing shall open downward and be screened to prevent the entrance of foreign material.
- F. Removal of drilling materials**
 1. In constructing a water well, the well driller shall take all reasonable precautions to protect the producing aquifer from contamination by drilling materials. Upon completion of the well, the well driller shall remove all foreign substances and materials introduced into the aquifer or aquifers during well construction. For purposes of this subsection, "substances and materials" means all drilling fluids, filter cake, lost circulation materials, and any other organic or inorganic substances.
 2. Materials known to present a health hazard, such as chrome-based mud thinners, asbestos products, and petroleum-based fluids, shall not be used as construction, seal or fill materials or drilling fluids.
 3. Drilling fluids and cuttings shall be contained in a manner which prevents discharge into any surface water.
- G. Repair of existing wells**
 1. If, in the repair of a well, the old casing is withdrawn, the well shall be recased in conformance with these rules.
 2. If an inner casing is installed to prevent leakage of undesirable water into a well, the annular space between the casings shall be completely sealed by packers, casing swedging, pressure grouting or other methods which will prevent the movement of water between the casings.
- H. Monitor wells**
 1. A monitor well may be screened up to ten feet above the highest seasonal static water level of record for the purpose of monitoring contaminants.
 2. A monitor well shall be identified as such on the vault cover or at the top of the steel casing. Identification information shall include the well registration number.
- I. Completion at the surface.** In areas of traffic or public rights-of-way, wells may be constructed below the land surface in a vault. All other requirements in this Article shall apply.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended effective June 18, 1990 (Supp. 90-2). The reference to R12-14-817(B)(1) in subsection (B)(1) corrected to read R12-15-817(B)(1) (Supp. 93-1).

R12-15-812. Special aquifer conditions

- A. Artesian wells**
 1. The well casing shall extend into the confining formation immediately overlying the artesian aquifer and shall be grouted from a minimum of ten feet into the confining formation to the land surface to prevent surface leakage into and subsurface leakage from the artesian aquifer.
 2. If leaks occur adjacent to the well or around the well casing, within 30 days the well shall be completed with the seals, packers, or casing and grouting necessary to eliminate such leakage or the well shall be abandoned according to R12-15-816.
 3. If the well flows at land surface, the well shall be equipped with a control valve, or suitable alternative means of completely controlling the flow, which must be available for inspection at the well site at all times.

- B. Mineralized or polluted water.** In all water-bearing geologic units containing mineralized or polluted water as indicated by available data, the borehole shall be cased and grouted so that contamination of the overlying or underlying groundwater zones will not occur.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended effective June 18, 1990 (Supp. 90-2).

R12-15-813. Unattended wells

All wells, when unattended during well drilling, shall be securely covered for safety purposes and to prevent the introduction of foreign substances into the well.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Section number corrected (Supp. 93-1).

R12-15-814. Disinfection of wells

All wells from which the water to be withdrawn is intended to be utilized for human consumption or culinary purposes without prior treatment shall be disinfected by the well drilling contractor before removing the drill rig from the well site in accordance with the requirements contained in Engineering Bulletin No. 8, "Disinfection of Water Systems", issued by the Arizona Department of Health Services in August 1978, and Engineering Bulletin No. 10, "Guidelines for the Construction of Water Systems", issued by the Arizona Department of Health Services in May 1978, both of which are incorporated herein by reference and are on file with the Office of the Secretary of State. Copies of the Engineering Bulletins referred to above may be obtained with these rules at the Office of the Secretary of State of the State of Arizona, State Capitol, West Wing, Phoenix, Arizona 85007, and from the Department of Water Resources, Operations Division, 15 South 15th Avenue, Phoenix, Arizona 85007. This rule does not include any later amendments or editions of those Bulletins.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended effective June 18, 1990 (Supp. 90-2).

R12-15-815. Removal of drill rig from well site

The drilling rig shall not be removed from the well site unless the well is in one of the following conditions:

1. Constructed in full conformance with R12-15-811 and R12-15-812 and either sealed with a cap or equipped with a pump.
2. Abandoned in accordance with R12-15-816.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended effective June 18, 1990 (Supp. 90-2).

R12-15-816. Abandonment

- A.** Well abandonment shall be performed only by a licensed well drilling contractor or single well licensee.
- B.** Except as provided in subsection (F) of this Section, the owner of a well shall file a notice of intent to abandon the well prior to abandonment, on a form prescribed and furnished by the Director, which shall include:
 1. The name and mailing address of the person filing the notice.
 2. The legal description of the land upon which the well proposed to be abandoned is located and the name and mailing address of the owner of the land.
 3. The legal description of the location of the well on the land.
 4. The depth, diameter and type of casing of the well.
 5. The well registration number.

6. The materials and methods to be used to abandon the well.
 7. When abandonment is to begin.
 8. The name and well drilling license number of the well drilling contractor or single well licensee who is to abandon the well.
 9. The reason for the abandonment.
 10. Such other information as the Director may require.
- C.** The Director shall, upon receipt of a proper notice of intent to abandon, mail a well abandonment authorization card to the designated well drilling contractor or single well licensee.
- D.** Except as described in subsection (F) of this Section, a well drilling contractor or single well licensee may commence abandoning a well only if the driller has possession of an abandonment card at the well site, issued by the Director in the name of the driller, authorizing the abandonment of that specific well or wells in that specific location.
- E.** Within 30 days after a well is abandoned pursuant to this Section, the well drilling contractor or single well licensee shall file with the Director a Well Abandonment Completion Report on a form prescribed and furnished by the Director which shall include the date the abandonment of the well was completed and such other information as the Director may require.
- F.** In the course of drilling a new well, the well may be abandoned without first filing a notice of intent to abandon and without an abandonment card. If the well is abandoned pursuant to this subsection without first filing a notice of intent to abandon and without an abandonment card, the well drilling contractor or single well licensee shall provide the following information in the Well Abandonment Completion Report:
1. The legal description of the land upon which the well was abandoned and the name and mailing address of the owner of the land.
 2. The legal description of the location of the well on the land.
 3. The depth, diameter and type of casing of the well prior to abandonment.
 4. The well registration number.
 5. The materials and methods used to abandon the well.
 6. The name and well drilling license number of the well drilling contractor or single well licensee who abandoned the well.
 7. The date of completion of the abandonment of the well.
 8. The reason for the abandonment.
 9. Such other information as the Director may require.
- G.** The abandonment of a well shall be accomplished through filling or sealing the well so as to prevent the well, including the annular space outside the casing, from being a channel allowing the vertical movement of water.
- H.** A well not penetrating an aquifer shall include a surface seal which shall be accomplished as follows:
1. If the casing is removed from the top 20 feet of the well, a cement grout plug shall be set extending from two feet below the land surface to a minimum of twenty feet below the land surface, and the well shall be backfilled above the top of the cement grout plug to the original land surface.
 2. If the casing is not removed from the top ten feet of the well, a cement grout plug shall be set extending from the top of the casing to a minimum of twenty feet below the land surface and the annular space outside the casing shall be filled with cement from the land surface to a minimum of twenty feet below the land surface.
- I.** In addition to the surface seal required in subsection (H):
1. A well penetrating a single aquifer system with no vertical flow components shall be filled with cement grout,

concrete, bentonite drilling muds, clean sand with bentonite, or cuttings from the well.

2. A well penetrating a single or multiple aquifer system with vertical flow components shall be sealed with cement grout or a column of bentonite drilling mud of sufficient volume, density, and viscosity to prevent fluid communication between aquifers.

- J.** Materials containing organic or toxic matter shall not be used in the abandonment of a well.
- K.** The owner or operator of the well shall notify the Director in writing no later than 30 days after abandonment has been completed. The notification shall include the well owner's name, the location of the well, and the method of abandonment.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended effective June 18, 1990 (Supp. 90-2).

R12-15-817. Exploration wells

- A.** Notification. Prior to drilling one or more exploration wells, the well owner, lessee, or exploration firm shall file a notice of intention to drill on forms provided by the Director. If the notice of intention to drill is filed for the project as a whole, the drilling card shall be issued for the project as a whole.
- B.** Construction and abandonment.
1. If an exploration well which is to be left open for re-entry at a later date encounters groundwater, it shall be cased and capped in accordance with R12-15-811, R12-15-812, and R12-15-822. The minimal length of surface seal shall be either 20 feet, or five feet into the first encountered consolidated formation, whichever is less. If no groundwater is encountered, the well shall be cased, grouted and capped in such a manner so as to prevent contamination of the well bore from the surface.
 2. Exploration wells not left open for re-entry shall be abandoned in accordance with R12-15-816.
- C.** Completion report. Within 30 days of project completion, the well owner, lessee, or exploration firm shall submit a project completion report on forms provided by the Director. The report shall include:
1. The exact number of wells drilled.
 2. The depth to water encountered or detected, with reference to specific wells.
 3. The abandonment method utilized, or construction details if completed for re-entry.
 4. Any other information which the Director may require.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended effective June 18, 1990 (Supp. 90-2).

R12-15-818. Well location

Except for monitor wells and piezometer wells, no well shall be drilled within 100 feet of any septic tank system, sewage disposal area, landfill, hazardous waste facility, storage area of hazardous materials or petroleum storage areas and tanks, unless authorized in writing by the Director.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended effective June 18, 1990 (Supp. 90-2).

R12-15-819. Use of well as disposal site

No well may be used as a storage or disposal site for sewage, toxic industrial waste, or other materials that may pollute the groundwater, except as authorized by the Arizona Department of Environmental Quality.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended

effective June 18, 1990 (Supp. 90-2).

R12-15-820. Request for variance

- A. If extraordinary or unusual conditions exist, a well drilling contractor or owner may request a variance from the provisions of this Article.
- B. The request for variance shall be in writing and shall set forth the location of the well site, the reasons for the request, and the recommended requirements to be applied. The Director may approve the request only if the well drilling contractor or owner has clearly demonstrated that the variance will not adversely affect other water users or the local aquifers.
- C. A variance shall not be effective until the well drilling contractor or owner receives from the Director a written approval of the variance and a new drilling card stamped "variance issued."

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended effective June 18, 1990 (Supp. 90-2).

R12-15-821. Special requirements

If the Director determines that the literal application of the minimum well construction requirements contained in this Article would not adequately protect the aquifer or other water users, the Director may require that further additional measures be taken, such as increasing the length of the surface seal or increasing the well's minimum distance from a potential source of contamination.

Historical Note

Adopted effective March 5, 1984 (Supp. 84-2). Amended effective June 18, 1990 (Supp. 90-2).

R12-15-822. Capping of open wells

- A. The owner of an open well shall either install a cap on the well or abandon the well in accordance with R12-15-816. Within five days after capping the well, the owner of the well shall file with the Department a notice of well capping on a form approved by the Director which shall include the following information:
 1. The name and address of the well owner.
 2. The name and address of the person installing the cap.
 3. The well registration number.
 4. The legal description of the location of the well.
 5. The date the well was capped.
 6. The method of capping.
 7. The type and diameter of casing.
- B. If no casing exists in an open well, or if the integrity of the existing casing is insufficient to allow installation of a cap, the well owner shall install a surface seal in accordance with R12-15-811(B) prior to capping.
- D. The owner of a well on which a cap is installed shall make the cap tamper resistant by welding the cap to the top of the casing by the electric arc method of welding, except that the owner of a well may make the cap tamper resistant by securing the cap to the top of the casing with a lock during temporary periods of well maintenance, modification or repair, not to exceed 30 days, or at any time if the well is a monitor well or piezometer well.

Historical Note

Adopted as an emergency effective March 2, 1989, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 89-1). Emergency expired. Readopted without change as an emergency effective June 2, 1989, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 89-2). Emergency expired. Readopted without change as an emergency effective September 5, 1989, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 89-3). Emergency

expired. Readopted without change as an emergency effective December 1, 1989, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 89-4). Emergency expired. Readopted without change as an emergency effective March 23, 1990, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 90-1). Permanent rule adopted with changes effective June 18, 1990 (Supp. 90-2).

R12-15-823. Reserved

through

R12-15-849. Reserved

R12-15-850. Evaluation of Notices of Intention to Drill; Notification of Registered Site Locations; Vertical Cross-Contamination Evaluation

- A. The Director shall, upon receipt of a complete and correct notice of intention to drill form required under A.R.S. § 45-596, or upon receipt of an application for a permit under A.R.S. § 45-597 through 45-599, identify whether the proposed well will be drilled within a groundwater basin or subbasin in which there exists a site listed on the registry established under A.R.S. § 49-287.01(D). If the proposed well is situated within such a groundwater basin or subbasin, the Director shall notify the applicant and the authorized well drilling contractor in writing of the existence of the site and shall enclose a map indicating the boundaries of all listed sites within the groundwater basin or subbasin. The notification letter shall include the name, address, and telephone number of a Department contact person, along with a reference to the provision in R12-15-851 that requires the applicant to notify the Department in advance of the date drilling of the well will commence. The Department shall also specify in the notification letter whether the applicant is subject to the requirements of R12-15-851.
- B. The Director shall, upon receipt of a complete and correct notice of intention to drill form required under A.R.S. § 45-596, or upon receipt of an application for a permit under A.R.S. § 45-597 through 45-599, identify whether the proposed well will be drilled within an area where existing or anticipated future groundwater contamination presents a risk of vertical cross-contamination, as defined in A.R.S. § 49-281(15). If the Director determines that the proposed well will be drilled in such an area, and if the Director finds that the requirements of R12-15-811 are insufficient to prevent the risk of vertical cross-contamination, the Director shall establish site-specific requirements pursuant to R12-15-812 and R12-15-821.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 469, effective January 3, 2000 (Supp. 00-1).

R12-15-851. Notification of Well Drilling Commencement

A well owner who has been issued a drilling card for a notice of intent to drill authorizing the drilling of a well located within a site listed on the registry established under A.R.S. § 49-287.01, shall provide written notice to the Director indicating the date drilling will commence. The well owner shall coordinate with the contracted well driller to ensure that the Department receives proper notification under this Section. This notification shall consist of a letter or facsimile transmission received by the Department at least 2 business days before drilling commences at the well site. The Department shall use notification letters required by R12-15-850(A) to inform well owners whether they are subject to the requirements of this Section.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 469, effective January 3, 2000 (Supp. 00-1).

R12-15-852. Notice of Well Inspection; Opportunity to Comment

- A. At least 30 days before the beginning of a well inspection under A.R.S. § 45-605(A), the Director shall notify in writing all potentially affected well owners of record within a community involvement area established under A.R.S. § 49-289.02 or within other areas that the Director has selected for inspection of wells that may be contributing to vertical cross-contamination. The notices shall include a map of the community involvement area, remedial site, or a subsection of either, that the Department intends to inspect, indicating the location of affected wells of record. The notice shall indicate the approximate date the inspection will start, the approximate duration of the inspection, an access agreement defining what specific activities will occur during a well inspection, and the name, address, and telephone number of a Department contact person.
- B. Once the Director has given notice of a well inspection under A.R.S. § 45-605(A), potentially affected well owners have 30 days from the date the letter is postmarked to comment on the proposed inspection. The Director, upon receiving a written request, may extend the comment period for a maximum of 30 additional days.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 469, effective January 3, 2000 (Supp. 00-1).

ARTICLE 9. WATER MEASUREMENT**R12-15-901. Definitions**

In addition to the definitions set forth in A.R.S. §§ 45-101 and 45-402, the following words and phrases shall have the following meanings, unless the context otherwise requires:

1. "Approved measuring device" means an instrument, approved by the Director pursuant to R12-15-903 or R12-15-909(A) which measures the volume or flow rate of water withdrawn, delivered, received, transported, recharged, stored, recovered, or used, and which measurements, when used with an approved measuring method, allow for accurate computation of a volume of water.
2. "Approved measuring method" means a procedure, approved by the Director in R12-15-903 or R12-15-909(A), which, when used with an approved measuring device, will accurately calculate a volume of water.
3. "Flow rate" or "discharge" means the volume of water, including any sediment or other solids that may be dissolved or mixed with it, which passes through a particular reference section in a unit of time.
4. "Measured system" means a system through which water passes for the purpose of withdrawal, delivery, receipt, transportation, recharge, storage, replenishment, recovery or use.
5. "Responsible party" means an irrigation district or a person required by A.R.S. Title 45 or by a permit, rule, or order issued pursuant to A.R.S. Title 45, to use a measuring device or method approved by the Director.

Historical Note

Adopted effective December 27, 1982 (Supp. 82-6).
Amended effective June 15, 1995 (Supp. 95-2). Amended to correct typographical error under A.A.C. R1-1-109 (Supp. 01-2).

R12-15-902. Installation of Approved Measuring Devices

- A. A responsible party shall install an approved measuring device to monitor the volume of water withdrawn, delivered, transported, recharged, stored, replenished, recovered, and used.
- B. A responsible party shall install and use a sufficient number of approved measuring devices to allow for the separate monitoring and reporting of the volume of water passing through the measured system pursuant to the following categories of rights:
 1. Irrigation grandfathered rights,
 2. Non-irrigation grandfathered rights,
 3. Service area rights,
 4. Groundwater withdrawal permits, and
 5. Recovery well permits or water storage permits.
 This subsection does not require separate measuring devices for rights within each category unless otherwise required by A.R.S. Title 45, a permit, rule, or order pursuant to that Title.
- C. An approved measuring device which measures groundwater withdrawals shall be installed as close to the wellhead as is practical, consistent with the manufacturer's instructions. An approved measuring device which measures another point in the measured system shall be installed as close as is practical to the point of delivery, receipt, transportation, recharge, storage, replenishment, recovery, or use which the device is intended to measure, consistent with the manufacturer's instructions.

Historical Note

Adopted effective December 27, 1982 (Supp. 82-6).
Amended effective June 15, 1995 (Supp. 95-2). Amended to correct typographical error under A.A.C. R1-1-109 (Supp. 01-2).

R12-15-903. Approved Water Measuring Devices and Methods

- A. Any measuring device is approved by the Director if it is installed, maintained, and used in accordance with the manufacturer's recommendations, and if it meets the accuracy requirements set forth in R12-15-905(A).
- B. An approved measuring device shall be used with an approved measuring method set forth in R12-15-903(C) or an alternative measuring method approved by the Director as provided in R12-15-909(A).
- C. The following water measuring methods are approved by the Director:
 1. Totalizing measuring method: This method requires an approved measuring device which continuously records the volume of water passing through the measured system;
 2. Electrical consumption measuring method: This method requires measurements of either pipeflow rates or open-channel flow rates used in combination with electrical energy records;
 3. Natural gas consumption measuring method: This method requires measurements of either pipe flow rates or open channel flow rates used in combination with natural gas energy records;
 4. Hour meter measuring method: This method requires measurements of either pipe flow rates or open-channel flow rates used in combination with hour meter readings;
 5. Elapsed time of flow method: This method requires measurements of flow rates used in combination with elapsed time of the flow. This method may be used only by a responsible party who receives water from an open channel or by a person or entity who delivers water in an open channel to one or more grandfathered rightholders or permit holders, if it is not possible to use the electrical or gas

consumption measurement methods or hour meter measuring method.

Historical Note

Adopted effective December 27, 1982 (Supp. 82-6).

Amended effective June 15, 1995 (Supp. 95-2).

R12-15-904. Water Measuring Method Reporting Requirements

- A. A responsible party using one of the water measuring methods described in R12-15-903 shall file, with the annual report required by A.R.S. Title 45 and on a form prescribed by the Director, the following information, unless that information has not changed from that submitted in the annual report filed in the previous calendar year.
 1. The approved measuring method used;
 2. The type of approved measuring device used;
 3. The make, model, and size of the approved measuring device used.
- B. Except as provided in R12-15-904(B)(5) and R12-15-909(C), a responsible party shall file with the annual report the information required in subsection (A) of this Section and the following information on a form prescribed by the Director:
 1. Totalizing measuring method:
 - a. The initial totalizing meter reading for the reporting year taken prior to the first use of the measured system during the reporting year;
 - b. The end totalizing meter reading for the year taken subsequently to the last use of the measured system during the reporting year;
 - c. The units in which the water is measured;
 - d. Whether the power meter serves uses other than the pump motor or engine;
 - e. An estimate of the amount of any water passing through the measured system during measuring device malfunctions;
 - f. If the well is in operation for more than a 30-day period, the results of a minimum of two flow-rate measurements per reporting year taken under normal system operating conditions. The responsible party shall not submit the results of the flow-rate measurements with the annual report unless a meter malfunction continues longer than 72 hours during the reporting year;
 - g. The installation or overhaul date of the totalizing meter; and
 - h. The name of the energy company supplying energy to the responsible party's measured system, its power account number, meter number, total energy consumption for the year, and the type of energy unit.
 2. Electrical consumption measuring method:
 - a. The results of a minimum of two flow-rate measurements per reporting year taken at least 30 days apart and under normal system operating conditions or, if the measured system is used during a single period of 30 days or less during the year, the result of one flow-rate measurement taken during that single period in that year under normal system operating conditions;
 - b. The dates of the measurements;
 - c. The discharges in gallons per minute;
 - d. The time, in seconds, of ten cycles of the electric meter disk, power indicator pulse, or an alternative measurement, provided that the alternative means of measurement is approved in advance by the Director;
 - e. The inside diameter of the discharge pipe;
 - f. The multiplier (K_r) and disk constant (K_h) of the electric meter; and
 - g. The name of the energy company supplying energy to the responsible party's measured system, its power account number, meter number, total energy consumption for the year, and the type of energy unit.
 3. Natural gas consumption measuring method:
 - a. The results of a minimum of two flow-rate measurements per reporting year taken at least 30 days apart and under normal system operating conditions or, if the measured system is used during a single period of 30 days or less during the year, the result of one flow-rate measurement taken during that single period in that year under normal system operating conditions;
 - b. The dates of the measurements;
 - c. The discharges in gallons per minute;
 - d. The amounts of gas per second in cubic feet indicated by the gas meter;
 - e. The billing factors (F);
 - f. The inside diameter of the discharge pipe; and
 - g. The name of the energy company supplying energy to the responsible party's measured system, its power account number, meter number, total energy consumption for the year, and the type of energy unit.
 4. Hour meter measuring method:
 - a. The results of a minimum of two flow-rate measurements per reporting year taken at least 30 days apart and under normal system operating conditions or, if the measured system is used during a single period of 30 days or less during the year, the result of one flow-rate measurement taken during that single period in that year under normal system operating conditions;
 - b. The dates of the measurements;
 - c. The discharges in gallons per minute;
 - d. The initial hour meter reading for the reporting year taken prior to the first use of the measured system during the reporting year;
 - e. The end hour meter reading taken subsequently to the last use of the measured system during the reporting year;
 - f. Whether the energy meter serves uses other than the pump motor or engine;
 - g. The installation or overhaul date of the hour meter; and
 - h. The name of the energy company supplying energy to the responsible party's measured system, its power account number, meter number, total energy consumption for the year, and the type of energy unit.
 5. Elapsed time of flow measuring method: A responsible party using this measuring method shall not be required to submit the following information with the annual report but instead shall record and retain it for three years after the reporting year.
 - a. The responsible party or agent shall measure and record an initial flow rate taken at the start of flow for each delivery of water;
 - b. If the flow rate continues for more than eight hours, a subsequent measured flow-rate measurement shall be taken. If any subsequently measured flow-rate differs by more than 10% from the initial flow rate,

and the delivery is not adjusted to conform with the initial flow rate, the responsible party or agent shall record the subsequent flow rate;

- c. The time the flow begins and the time the flow ends for each delivery of water; and
- d. The dates of the measurements.

- C. A responsible party or person or entity who uses an approved measuring method or an approved alternative water measurement method shall save the records required by subsections (A) and (B) of this Section for three years after the reporting year.

Historical Note

Adopted effective December 27, 1982 (Supp. 82-6).
Former Section R12-15-904 renumbered to R12-15-905,
new Section adopted effective June 15, 1995 (Supp. 95-2).

R12-15-905. Accuracy of Approved Measuring Devices

- A. A responsible party shall install, maintain, and use an approved measuring device and method in a manner which will ensure that its measurement error does not exceed 10% of the actual flow rate.
- B. All measured systems shall be installed or constructed and thereafter maintained so as to allow the Director, using another measuring device, to check readily the accuracy of the measuring device utilized by the responsible party.

Historical Note

Adopted effective December 27, 1982 (Supp. 82-6).
Former Section R12-15-905 renumbered to R15-15-906,
new Section R12-15-905 renumbered from R12-15-904
and amended effective June 15, 1995 (Supp. 95-2).

R12-15-906. Repair and Replacement of Approved Measuring Devices

If an approved measuring device fails to perform its designated function for more than 72 hours, the responsible party shall notify the Director of the failure, in writing, within seven calendar days after the discovery of the failure of the device. The reason for such failure shall be stated, as well as the estimated date of return to service of the device. If the malfunction is discovered by the Director and the malfunction does not appear to be the result of an attempt to render the device inaccurate, the Director shall notify the responsible party of the malfunction. The responsible party shall return the measuring device to full service within 30 days of either original notice by the responsible party to the Director or by the Director to the responsible party, unless repair or replacement service or parts are not available. In such case, the responsible party shall notify the Director of the delay within seven days and the reasons for it. The responsible party shall take corrective action in such cases as soon as practical. In all cases, the responsible party shall notify the Director within seven days when the measuring device is returned to full service and shall submit on a form prescribed by the Director estimates of the volume of water, if any, passing through the measured system during the period the measuring device was out of service and a description of the method used to calculate the estimates.

Historical Note

Section R12-15-906 renumbered from R12-15-905 and
amended effective June 15, 1995 (Supp. 95-2).

R12-15-907. Calculation of Irrigation Water Deliveries

If one or more irrigation grandfathered rights receive water by a common distribution system where water is measured with an approved device or method at the point of delivery to the common distribution system, but not at a point of delivery to each irrigation grandfathered right, each irrigation grandfathered rightholder or

agent shall report the water used by either of the following methods:

1. Estimate the amount of water used based on a pro rata share of the acres irrigated, or
2. Estimate the amount of water used based on a combination of the pro rata share of the acres irrigated and the consumptive use of each crop grown.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R12-15-908. Measurement of Water by One Person on Behalf of Another

A responsible party shall be liable for any fines, penalties, or other sanctions resulting from the installation, monitoring, use, or accuracy of any measuring device, method, or recordkeeping, notwithstanding that the installation, monitoring, use, or recordkeeping may have been done by an agent of the responsible party.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R12-15-909. Alternative Water Measuring Devices, Methods, and Reporting

- A. A responsible party may use an alternative water measuring device or method that differs from those described in R12-15-903 provided the device or method is approved in advance by the Director. The Director shall approve an alternative water measuring device or method if the device meets the requirements of R12-15-905. The Director may require from the responsible party such information as may be necessary to demonstrate that the alternative device or method meets the requirements of R12-15-905.
- B. Responsible parties may substitute equivalent information for the information required on the annual report form or use reporting formats that differ from that required in R12-15-904, provided the substituted information or format is approved in advance by the Director.
- C. Responsible parties may use estimation methods that differ from those described in R12-15-907 provided they are approved in advance by the Director.
- D. A municipal provider is exempted from the reporting requirements under R12-15-904 and the provisions under R12-15-906 pertaining to notification to the Director of measuring device malfunctions regarding metered service connections, unless required to report by A.R.S. Title 45 or by a permit, rule, or order issued pursuant to A.R.S. Title 45.
- E. Municipal providers and irrigation districts may notify the Director of measuring device malfunctions at the time of filing the annual report and in a manner that differs from the requirements of R12-15-906, provided the municipal provider or irrigation district implements a schedule of regular maintenance of measuring devices, repairs or replaces malfunctioning measuring devices within seven days of discovery of the malfunction, and the alternative notification is approved in advance by the Director.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

ARTICLE 10. REPORTING REQUIREMENTS FOR ANNUAL REPORTS, ANNUAL ACCOUNTS, OPERATING FLEXIBILITY ACCOUNTS, AND CONVEYANCES OF GROUNDWATER RIGHTS

R12-15-1001. Definitions

In addition to the definitions set forth in A.R.S. §§ 45-101 and 45-402, the following words and phrases in this Article shall have the following meanings, unless the context otherwise requires:

1. "Annual account" means an accounting of water required to be filed pursuant to A.R.S. § 45-468.
2. "Annual report" means an annual report of water withdrawn, delivered, received, transported, recharged, stored, recovered or used as required by A.R.S. §§ 45-467, 45-632, 45-655, or 45-815.
3. "Central Arizona project water" means Colorado River water delivered through the facilities of the central Arizona project, and surface water from any other source conserved and developed by dams and reservoirs in the central Arizona project and lawfully delivered by the United States or a multi-county conservation district.
4. "Decreed or appropriative surface water" means surface water which is delivered or used pursuant to a decreed or appropriative water right, except any such water which is included in central Arizona project water.
5. "Farm" means an area of irrigated land under the same ownership as defined in A.R.S. § 45-402(9), including the area of land described in a certificate of irrigation grandfathered right, as well as contiguous land which the owner is legally entitled to irrigate only with decreed or appropriative surface water.
6. "Maximum annual groundwater allotment" means the quantity of water in acre-feet obtained by multiplying the number of water duty acres for a farm by the current irrigation water duty for the farm unit.
7. "Normal flow" means water which is delivered or used pursuant to a right to appropriate an unstored, natural flow of surface water.
8. "Operating flexibility account" means an accounting of water use pursuant to an irrigation grandfathered right as provided in A.R.S. § 45-467.
9. "Responsible party" means a person who is required by law to file an annual account or annual report.
10. "Spill water" means surface water, other than Colorado River water, which is released from a storage facility into a surface water distribution system either through a spillway or to avoid using a spillway, and which is released:
 - a. Pursuant to the dam operator's written criteria for releasing water to avoid spilling which have been approved in writing by the Director; or
 - b. Because there is a risk, unacceptable to a reasonable person, that the storage capacity of the facility will be exceeded within the next 30 days because the facility is near capacity and either the inflow to the facility or the forecast runoff into the facility is equal to or greater than the quantity of water ordered from the facility; or
 - c. Because there is a risk, unacceptable to a reasonable person, that the storage capacity of the facility will be exceeded more than 30 days in the future because the forecast runoff into the facility exceeds current unused storage capacity and projected water demand during the forecast period, provided that the Director has made a written finding before the release that the forecast is reasonable.
11. "Surface water right acre" means land to which the owner is legally entitled to apply decreed or appropriative surface water.
12. "Tailwater" means water which, after having been applied to a farm for irrigation purposes,
 - a. Is subsequently used for the irrigation of a different farm, without having entered the distribution system of a city, town, private water company or irrigation district, or
 - b. Is delivered to an irrigation district in accordance with R12-15-1010. Such water, once having entered the distribution system of the irrigation district, loses its characterization as tailwater.
13. "Water deliverer" means a city, town, private water company or irrigation district delivering a combination of groundwater and any other type of water for irrigation purposes.

Historical Note

Adopted effective December 27, 1982 (Supp. 82-6). Section R12-15-1001 renumbered to R12-15-1003, new Section R12-15-1001 adopted effective December 12, 1990 (Supp. 90-4). Amended to correct typographical error under A.A.C. R1-1-109 (Supp. 01-2).

R12-15-1002. Form of annual account or annual report

- A. A person filing an annual account or an annual report shall do so on a form prescribed by the Director, unless the person has requested and received the Director's prior written approval to use an alternative form.
- B. A person may file both an annual account and an annual report in one document. A person required to file an annual account shall designate in the annual account whether the annual account is being filed also as an annual report.

Historical Note

Adopted effective December 12, 1990 (Supp. 90-4).

R12-15-1003. Filing of annual reports/accuracy

- A. Each person required to file an annual report of groundwater withdrawals, transportation and use pursuant to A.R.S. § 45-632 shall file a report no later than March 31, 1985, for the period from January 1, 1984, through December 31, 1984. Subsequent annual reports shall be filed no later than March 31st of each year for the preceding calendar year.
- B. A person shall not be found to be in violation of the reporting requirements of A.R.S. § 45-632 if the quantity of groundwater in fact withdrawn or used does not exceed the quantity measured, totalized, and reported by the person, by more than the following percentages, and the error is not the result of an intentional misrepresentation.

From 7/1/1983 through 12/31/1989	15%
From 1/1/1990 through 12/31/1999	10%
From 1/1/2000 through 12/31/2009	8%

Historical Note

Section R12-15-1003 renumbered from R12-15-1001 effective December 12, 1990 (Supp. 90-4).

R12-15-1004. Filing of an annual report required by A.R.S. § 45-467 or 45-632 on behalf of the responsible party

- A. A responsible party shall be liable for any fines, penalties or other sanctions resulting from or attributable to the filing or contents of an annual report required by A.R.S. §§ 45-467 or 45-632, notwithstanding that the annual report was filed for the responsible party by an irrigation district pursuant to A.R.S. § 45-632(D), or by another person in a form acceptable to the Director.
- B. If a responsible party has not filed an annual report required by A.R.S. § 45-467 or 45-632 for a calendar year, and the Department receives an annual report for that calendar year purportedly filed on behalf of the responsible party by an irrigation district pursuant to A.R.S. § 45-632(D), or by another person in a form acceptable to the Director, there shall be a rebuttable presumption that the annual report was filed with the responsible party's knowledge, consent, and authorization.

Historical Note

Adopted effective December 12, 1990 (Supp. 90-4).

Amended to correct typographical error under A.A.C.
R1-1-109 (Supp. 01-2).

R12-15-1005. Management plan monitoring and reporting requirements

A responsible party who is required by a provision of a management plan to comply with monitoring and reporting requirements shall comply with such requirements and shall include all such information in an annual account or annual report.

Historical Note

Adopted effective December 12, 1990 (Supp. 90-4).

R12-15-1006. Reporting requirements for holders of recovery well permits

A person who holds a recovery well permit shall include in the annual report required by A.R.S. § 45-815(B), the following additional information:

1. The names of any persons, other than non-irrigation customers of cities, towns, private water companies and irrigation districts, to whom the recovered water was delivered during the year; the quantity of recovered water delivered to each such person; and the uses to which the recovered water was applied.
2. If the recovered and delivered water included commingled groundwater, decreed or appropriative surface water other than spill water, central Arizona project water, effluent or spill water, an estimate of the quantity of each type of water which was delivered to each person or put to a specific use.

Historical Note

Adopted effective December 12, 1990 (Supp. 90-4).

R12-15-1007. Reporting requirements for annual account

A person required to file an annual account pursuant to A.R.S. § 45-468 shall account for water provided to the following classes of users:

1. Cities and towns,
2. Private water companies,
3. Irrigation districts,
4. Dairies,
5. Metal mining facilities,
6. Cattle feed lots,
7. Turf-related facilities,
8. Sand and gravel facilities,
9. Electrical power generation facilities,
10. Other industrial users.

Historical Note

Adopted effective December 12, 1990 (Supp. 90-4).

R12-15-1008. Information required to maintain an operating flexibility account

A. A responsible party who withdraws, receives or uses groundwater during a calendar year pursuant to an irrigation grandfathered right shall include the following information for the calendar year in an annual report filed pursuant to A.R.S. § 45-467 or 45-632:

1. The quantity of groundwater withdrawn from each well;
2. The quantity of groundwater withdrawn and delivered to another person for irrigation purposes;
3. The quantity of groundwater received from a city, town, private water company or irrigation district;
4. The quantity of groundwater received from a person other than a city, town, private water company or irrigation district;
5. The quantity of effluent received;
6. The quantity of decreed or appropriative surface water received, other than normal flow and spill water;

7. The quantity of normal flow received;
8. The quantity of spill water received;
9. The quantity of tailwater used;
10. The quantity of tailwater delivered in accordance with the provisions of R12-15-1010(A), and the farm or irrigation district to which the tailwater was delivered;
11. The quantity of central Arizona project water received;
12. The quantity of any other surface water received which has not been accounted for pursuant to subsections (6) through (11) of this subsection;
13. The number of surface water right acres in the farm to which the irrigation grandfathered right is appurtenant;
14. The quantity of water used for the legal irrigation of acres in the farm to which irrigation grandfathered rights are not appurtenant, except that the responsible party may omit this information, and it shall be presumed that the total amount of water received or used for the irrigation of the farm was applied to acres to which irrigation grandfathered rights are appurtenant;
15. Such other information as the Director may reasonably require to accomplish the management goals of the applicable active management area.

B. A water deliverer shall include the following information for an accounting period in an annual account filed pursuant to A.R.S. § 45-458:

1. The quantity of groundwater delivered to each farm;
2. The quantity of normal flow delivered to each farm;
3. The quantity of spill water delivered to each farm;
4. The quantity of decreed or appropriative surface water, other than normal flow and spill water, delivered to each farm;
5. The quantity of central Arizona project water delivered to each farm;
6. The quantity of decreed or appropriative surface water, other than normal flow and spill water, delivered for use within the service area of the water deliverer, including all farm and non-farm deliveries;
7. The number of surface water right acres within the service area of the water deliverer;
8. Such other information as the Director may reasonably require to accomplish the purposes of A.R.S. § 45-468.

Historical Note

Adopted effective December 12, 1990 (Supp. 90-4).

R12-15-1009. Credits to operating flexibility account

A. Except as provided in subsection (B) of this rule and in R12-15-1010, if the total amount of water from all sources used by a farm for irrigation purposes in a calendar year is less than the farm's maximum annual groundwater allotment for the year, the difference shall be registered as a credit to the farm's operating flexibility account.

B. If a farm is within the service area of a water deliverer, the credit as calculated pursuant to subsection (A) of this rule shall be reduced by an amount equal to the difference between the farm's pro rata share of the total quantity of decreed or appropriative surface water, other than normal flow or spill water, delivered by the water deliverer during the year for use within its service area, and the quantity of such water actually received by the farm during the year. The farm's pro rata share of such water shall be determined by dividing the number of surface water right acres in the farm that are within the service area of the water deliverer by the total number of surface water right acres within the service area of the water deliverer, and multiplying the quotient by the total amount of such water.

Historical Note

Adopted effective December 12, 1990 (Supp. 90-4).

R12-15-1010. Operating flexibility account; tailwater

- A.** For purposes of calculating credits or debits to the operating flexibility account, the amount of tailwater delivered by a person to another farm or to an irrigation district for irrigation purposes during a calendar year shall not be considered as having been used for the irrigation of the farm on which the tailwater originated, provided and to the extent that:
1. The Director has approved, prior to January 1 of the calendar year in which the deliveries of tailwater take place, a written plan to measure and record the tailwater deliveries. The plan shall include:
 - a. A totalizing water measuring device to be installed and used in such a manner as to enable a reporting of tailwater deliveries with no greater than a ten percent margin of error,
 - b. The procedures by which accurate records of the tailwater deliveries will be kept.
 - c. The manner in which the tailwater deliveries will be made, and
 - d. The farm or irrigation district to which the tailwater will be delivered.
 2. The person has measured, recorded, and delivered the tailwater in full accordance with the plan as approved pursuant to subsection (1) of this subsection.
 3. The tailwater was directly delivered to:
 - a. A specified farm and was used for the legal irrigation of irrigation acres or surface water right acres on that farm, or
 - b. A specified irrigation district and was used for the legal irrigation of irrigation acres or surface water right acres within that district.
- B.** A person who delivers tailwater in accordance with subsection (A) of this rule, and a person who directly receives and uses such tailwater pursuant to subsection (A)(3)(a) of this rule, shall account for the tailwater, for reporting purposes, as if it were comprised of a mixture of groundwater, decreed and appropriative surface water other than normal flow, central Arizona project water, spill water, other surface water, and effluent, as applicable, in the same proportions as such waters comprise the total amount of water other than normal flow received or withdrawn for irrigation use during the calendar year on the farm on which the tailwater originated.
- C.** A person who uses tailwater which has not been delivered and accounted for as provided in subsections (A) and (B) of this rule may credit against the person's use of groundwater in a calendar year the amount of such tailwater used during the calendar year if the use of such tailwater would cause a debit to be incurred. The credit shall be applied only against the person's operating flexibility account debits which otherwise would have been incurred that year and shall not be used to discharge debits from prior years or accumulate credits for future years. For purposes of calculating credits to the person's operating flexibility account, such tailwater shall be treated as groundwater, unless reported otherwise according to its source.
- D.** An irrigation district that receives tailwater pursuant to subsection (A)(3)(b) shall account for the water in the same manner as other water in the district's distribution system.

Historical Note

Adopted effective December 12, 1990 (Supp. 90-4).

R12-15-1011. Statement of operating flexibility account

- A.** The operating flexibility account for each farm shall be established with a balance of zero on the first day of the first year in

which the person entitled to use groundwater pursuant to the irrigation grandfathered right is required to comply with the first irrigation water duty established by the Director pursuant to A.R.S. Title 45, Chapter 2, Article 9.

- B.** The Director shall issue annually to the owner or user of an irrigation grandfathered right for which a current annual report has been filed a statement of the operating flexibility account setting forth the status of the operating flexibility account for the farm, based on the information submitted in the annual report.
- C.** Upon a motion or on the initiative of the Director, the Director may amend a statement of operating flexibility account at any time to correct clerical mistakes or to adjust the balance of the account based on information submitted in an amended or late annual report. The Director shall give written notice of any amendments made pursuant to this subsection to the person to whom the statement of operating flexibility account was issued.
- D.** A statement of operating flexibility account or an amendment to a statement of operating flexibility account may be appealed as provided by A.R.S. § 45-405.

Historical Note

Adopted effective December 12, 1990 (Supp. 90-4).

R12-15-1012. Rule of construction

Nothing in A.A.C. R12-15-1001 through R12-15-1011 shall be construed to determine the legality of any water use for which an accounting is required under these rules.

Historical Note

Adopted effective December 12, 1990 (Supp. 90-4).

R12-15-1013. Retention of records for annual accounts and annual reports

The responsible party shall keep and maintain, for at least three calendar years following the filing of an annual account or an annual report, all records which may be necessary to verify the information and data contained therein.

Historical Note

Adopted effective December 12, 1990 (Supp. 90-4).

R12-15-1014. Late filing or payment; extension and late payment of fees

- A.** An annual account, an annual report, or a request for extension pursuant to subsection (E) of this rule shall be deemed to be filed at the time a complete annual account, a complete annual report or a request for extension is hand-delivered to any Department office, or at the time the envelope in which it is mailed is postmarked.
- B.** Except as provided in subsection (C) of this rule, groundwater withdrawal fees and stored water recovery fees shall be deemed to be paid at the time the fees are hand-delivered to any Department office, or at the time the envelope in which they are mailed is postmarked.
- C.** If any groundwater withdrawal fees or stored water recovery fees are not paid in cash in the first instance and the instrument by which they are paid is not honored and paid upon initial demand by the Department, the fees shall be deemed to be paid at the time the Department actually receives the fees in cash or the instrument by which they are paid is subsequently honored and paid to the Department.
- D.** If an annual account or an annual report which is filed on or before March 31 is found by the Director to be incomplete, the Director shall notify the responsible party of the inadequacies and give the responsible party 30 days to provide the missing information in a form prescribed by the Director. If the necessary information is not timely provided, late penalties as pro-

vided in A.R.S. §§ 45-632(K), 45-655(C), or 45-815(D) shall begin to accrue on the 31st day following the notice of inadequacy and the Director shall not recommend to a court, pursuant to A.R.S. §§ 45-634(C), 45-635, 45-817(6), and 45-818, that civil penalties be imposed through the first 30 days following the notice of inadequacy. However, if the inadequacy included the failure to pay all groundwater withdrawal fees due or all stored water recovery fees due, the late penalties as provided in A.R.S. §§ 45-614(E) or 45-814(D) shall, except as provided in subsection (E) of this rule, begin to accrue on April 1.

- E. A person may request a 30-day extension of the first day of accrual of the late penalties provided in A.R.S. §§ 45-614(E), 45-632(K), 45-655(C), 45-814(D), and 45-815(D) and of the civil penalties that the Director may recommend that a court impose pursuant to A.R.S. §§ 45-634(C), 45-635, 45-817(C) and 45-818. The request shall be filed no later than March 31. The Director may grant a request for a 30-day extension if good cause is shown. If the request is granted, and the person making the request is not subsequently found to have presented false or misleading information to the Director, the late penalties and civil penalties shall begin to accrue on May 1. The Director shall not grant an extension to a person who, in the preceding calendar year, was granted an extension and who subsequently failed to file a complete annual account or annual report and pay all groundwater withdrawal fees due and all stored water recovery fees due within the 30-day extension period.

Historical Note

Adopted effective December 12, 1990 (Supp. 90-4).

R12-15-1015. Reporting requirements for conveyances of grandfathered rights and groundwater withdrawal permits

- A. A person who is required by A.R.S. § 45-482 to notify the Director of a conveyance of a grandfathered right shall file a notice of conveyance, on a form prescribed by the Director, within 30 days of the conveyance. All parties to the conveyance may use a single form for the required notice. Except provided in subsection (B) of this rule, the notice of conveyance shall include an accounting of the amount of water withdrawn or received pursuant to that grandfathered right from January 1 to the date of conveyance for that calendar year.
- B. If the person to whom a grandfathered right is conveyed is unable, because of extraordinary circumstances and good cause shown, to perform the accounting otherwise required by subsection (A) of this rule, the Director may waive the requirement for that person.
- C. If a person, including a person who is granted a waiver pursuant to subsection (B) of this rule, fails to include the required accounting in a timely filed notice of conveyance pursuant to subsection (A) of this rule, the Director shall determine the amount of groundwater withdrawn or received pursuant to the grandfathered right from January 1 to the date of conveyance for that calendar year. Such a person shall bear the burden, in any subsequent administrative or judicial proceeding, of establishing by clear and convincing evidence that the Director's determination was incorrect.
- D. A person requesting the Director's approval of a proposed conveyance of a groundwater withdrawal permit pursuant to A.R.S. § 45-520(B) shall include with such request the quantity of groundwater withdrawn pursuant to the groundwater withdrawal permit for that calendar year and all other information required to be submitted pursuant to A.R.S. § 45-632.

Historical Note

Adopted effective December 12, 1990 (Supp. 90-4).

ARTICLE 11. INSPECTIONS AND AUDITS

R12-15-1101. Inspections

- A. For the purpose of this rule, "inspection" means an entry by the Director at reasonable times onto private or public property:
1. To obtain factual data or access to records required to be kept under A.R.S. §§ 45-632, 45-655, 45-815, or 45-864; or
 2. To inspect a well or another facility for the withdrawal, transportation, use, measurement or recharge of groundwater under A.R.S. § 45-633; or
 3. To inspect an underground or indirect storage and recovery project, a well, or another facility for the recovery or use of stored water under A.R.S. §§ 45-816 or 45-865; or
 4. To inspect a body of water under A.R.S. § 45-135 or to ascertain compliance with A.R.S. Title 45, Chapter 1, Article 3; or
 5. To inspect or to obtain factual data or access to records pursuant to any Section of A.R.S. Title 45 that requires the Director to adopt rules for conducting inspections, examining records, and obtaining warrants.
- B. Not less than seven days prior to an inspection, the Director shall mail notice of the inspection by first class letter to the owner, manager or occupant of the property. The notice shall include the statutory authorization and purpose for the inspection. The notice shall specify a date and time certain or a seven-day period within which the inspection may take place. If a request is made before the seven-day period, the Director shall schedule the inspection for a time certain within the seven-day period to allow an opportunity for a representative of the property to be present at the inspection. The notice shall include the name and telephone number of a Department employee who may be contacted to arrange such an appointment.
- C. Whenever practical, Department employees shall minimize disruptions to on-going operations caused by an inspection.
- D. If the property is controlled or secured against entry at the time specified in the notice of inspection but consent to the inspection was not denied, the Director shall give a second notice in the manner prescribed in subsection (B) before seeking a search warrant or its equivalent. The second notice shall request that a representative of the property be present at the inspection to accompany Department personnel.
- E. If the Director gives notice of an inspection and is not permitted to conduct an inspection, the Director may apply for and obtain a search warrant or its equivalent.
- F. Notice of inspection shall not be required under subsections (B) and (D) of this rule if the Director reasonably believes that notice would frustrate the enforcement of A.R.S. Title 45, or where entry is sought for the sole purpose of inspecting water measuring devices required pursuant to A.R.S. § 45-604.
- G. The Director shall mail a copy of the report of the inspection either to the person to whom the notice of inspection was directed, or to the owner, manager or occupant of the property if no notice of inspection was given. The report shall include the date of the inspection and a short summary of the findings. If no notice was given, the report shall include an explanation of the reason for determining that notice would not be given, unless providing the explanation would frustrate enforcement of A.R.S. Title 45. An aggrieved person may file with the Director written comments on the report within 30 days after the report is mailed.
- H. The owner, manager or occupant of the property may waive the provisions for notice contained in this rule.

Historical Note

Adopted effective August 31, 1992 (Supp. 92-3).

Amended effective July 22, 1994 (Supp. 94-3).

R12-15-1102. Audits

- A. For the purpose of this rule, "representative" means
1. An officer or director of a corporation subject to the audit,
 2. A general partner of a partnership subject to the audit, or
 3. A person who appears at an audit and produces a signed authorization to act on behalf of the person subject to the audit.
- B. This rule applies to audits conducted pursuant to A.R.S. §§ 45-633(C), 45-880.01, and any other Section of A.R.S. Title 45 that authorizes the Director to require a person to appear at the Director's office and produce records and information and that also requires the Director to adopt rules for conducting inspections, examining records, and obtaining warrants.
- C. No less than 20 days prior to an audit, the Director shall mail notice of the audit by first class letter to the person that is the subject of the audit. The notice shall state the date, time and place of the audit. The notice shall specify the records or information which the person must produce. The notice shall also include the statutory authorization and purpose for the audit and the name and telephone number of a Department employee who may be contacted for further information. The audit shall be held at the Department's offices, unless the Director grants a request to have the audit conducted at a different location.
- D. The person subject to the audit or a representative shall appear at the scheduled time and shall produce the records and information specified in the notice. The person subject to the audit or a representative may make one request to reschedule the audit, which the Department shall grant if practicable.
- E. The Director shall mail a copy of the report of the audit to the person subject to the audit. An aggrieved person may file with the Director written comments on the report within 30 days after the report is mailed.
- F. The person subject to the audit may waive the provisions for notice contained in this rule.

Historical Note

Adopted effective August 31, 1992 (Supp. 92-3).

Amended effective July 22, 1994 (Supp. 94-3).

ARTICLE 12. DAM SAFETY PROCEDURES**R12-15-1201. Applicability**

- A. This Article applies to any artificial barrier meeting the specifications of A.R.S. § 45-1201(1) as interpreted by R12-15-1204. This Article applies to an application for the construction of a dam and reservoir; an application to reconstruct, repair, alter, enlarge, breach, or remove an existing dam and reservoir, including a breached or damaged dam; operation and maintenance of an existing dam and reservoir; and enforcement. A structure identified in R12-15-1203 is exempt from this Article.
- B. This Article is applicable to any dam regardless of hazard potential classification, with the following exceptions:
1. R12-15-1208, R12-15-1209, R12-15-1213, R12-15-1221, R12-15-1225, and R12-15-1226 apply only to a dam classified as a high or significant hazard potential dam.
 2. R12-15-1210 applies only to a dam classified as a low hazard potential dam. A low hazard potential dam is exempt from R12-15-1208, R12-15-1209, R12-15-1211, R12-15-1213, R12-15-1221, R12-15-1225, and R12-15-1226.
 3. R12-15-1211 applies only to a dam classified as a very low hazard potential dam. A very low hazard potential

dam is exempt from R12-15-1208, R12-15-1209, R12-15-1210, R12-15-1212, R12-15-1213, R12-15-1215, R12-15-1216, R12-15-1221, R12-15-1225, and R12-15-1226.

4. R12-15-1216(B) applies only to an embankment dam.

Historical Note

Adopted effective November 2, 1978 (Supp. 78-6).

Former Section R12-15-01 renumbered without change as Section R12-15-1201 effective October 8, 1982 (Supp. 82-5). Section repealed; new Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1202. Definitions

In addition to the definitions provided in A.R.S. § 45-1201, the following definitions are applicable to this Article:

1. "Alteration or repair of an existing dam or appurtenant structure" means to make different from the originally approved construction drawings and specifications or current condition without changing the height or storage capacity of the dam or reservoir, except for ordinary repairs and general maintenance as prescribed in R12-15-1217.
2. "Appurtenant structure" means any structure that is contiguous and essential to the safe operation of the dam including embankments, saddle dikes, outlet works and controls, diversion ditches, spillway and controls, access structures, bridges, and related housing at a dam.
3. "Classification of dams" means the placement of dams into categories based upon an evaluation of the size and hazard potential, regardless of the condition of the dam.
4. "Concrete dam" means any dam constructed of concrete, including arch, gravity, arch-gravity, slab and buttress, and multiple arch dams. A dam that only has a concrete facing is not a concrete dam.
5. "Construction" means any activity performed by the owner or someone employed by the owner that is related to the construction, reconstruction, repair, enlargement, removal, or alteration of any dam, unless the context indicates otherwise. Construction is performed after approval of an application and before issuance of a license.
6. "Dam failure inundation map" means a map depicting the maximum area downstream from a dam that would be flooded in the event of the worst condition failure of the dam.
7. "Department" means the Arizona Department of Water Resources.
8. "Director" means the Director of the Arizona Department of Water Resources or the Director's designee.
9. "Embankment dam" means a dam that is constructed of earth or rock material.
10. "Emergency spillway" means a spillway designed to safely pass the inflow design flood routed through the reservoir. If the flow is controlled by gates, it is a controlled spillway. If the flow is not controlled by gates, it is an uncontrolled spillway.
11. "Engineer" means a Professional Engineer registered and licensed in accordance with A.R.S. Title 32, Chapter 1, with proficiency in engineering and knowledge of dam technology.
12. "Enlargement to an existing dam or appurtenant structure" means any alteration, modification, or repair that increases the vertical height of a dam or the storage capacity of the reservoir.
13. "Flashboards" mean timber, concrete, or steel sections placed on the crest of a spillway to raise the retention

- water level that may be quickly removed at time of flood either by a tripping device or by designed failure of the flashboards or their supports.
14. "Flood control dam" means a dam that uses all of its reservoir storage capacity for temporary impoundment of flood waters and collection of sediment or debris.
 15. "Hazard potential" means the probable incremental adverse consequences that result from the release of water or stored contents due to failure or improper operation of a dam or appurtenances.
 16. "Hazard potential classification" means a system that categorizes dams according to the degree of probable incremental adverse consequences of failure or improper operation of a dam or appurtenances. The hazard potential classification does not reflect the current condition of the dam with regard to safety, structural integrity, or flood routing capacity.
 17. "Height" means the vertical distance from the lowest elevation of the outside limit of the barrier at its intersection with the natural ground surface to the spillway crest elevation. For the purpose of determining jurisdictional status, the lowest elevation of the outside limit of the barrier may be the outlet pipe invert elevation if the outlet is constructed below natural ground.
 18. "Impound" means to cause water or a liquid to be confined within a reservoir and held with no discharge.
 19. "Incremental adverse consequences" means under the same loading conditions, the additional adverse consequences such as economic, intangible, lifeline, or human losses, that would occur due to the failure or improper operation of the dam over those that would have occurred without failure or improper operation of the dam.
 20. "Inflow design flood" or "IDF" means the reservoir flood inflow magnitude selected on the basis of size and hazard potential classification for emergency spillway design requirements of a dam.
 21. "Intangible losses" means incremental adverse consequences to property that are not economic in nature, including property related to social, cultural, unique, or resource-based values, including the loss of irreplaceable and unique historic and cultural features; long-lasting pollution of land or water; or long-lasting or permanent changes to the ecology, including fish and endangered species habitat identified and evaluated by a public natural resource management or protection agency.
 22. "Jurisdictional dam" means a barrier that meets the definition of a dam prescribed in A.R.S. § 45-1201 that is not exempted by R12-15-1203 over which the Department of Water Resources exercises jurisdiction.
 23. "Levee" means an embankment of earth, concrete, or other material used to prevent a watercourse from spreading laterally or overflowing its banks. A levee is not used to impound water.
 24. "License" means license of final approval issued by the Director upon completion or enlargement of a dam under A.R.S. § 45-1209.
 25. "Lifeline losses" mean disruption of essential services such as water, power, gas, telephone, or emergency medical services.
 26. "Liquid-borne material" means mine tailings or other milled ore products transported in a slurry to a storage impoundment.
 27. "Maximum credible earthquake" means the most severe earthquake that is believed to be possible at a point on the basis of geologic and seismological evidence.
 28. "Maximum water surface" means the maximum elevation of the reservoir water level attained during routing of the inflow design flood.
 29. "Natural ground surface" means the undisturbed ground surface before excavation or filling, or the undisturbed bed of the stream or river.
 30. "Outlet works" means a closed conduit under or through a dam or through an abutment for the controlled discharge of the contents normally impounded by a dam and reservoir. The outlet works include the inlet and outlet structures appurtenant to the conduit. Outlet works may be controlled or uncontrolled.
 31. "Probable" means likely to occur, reasonably expected, and realistic.
 32. "Probable maximum flood" or "PMF" means the flood runoff expected from the most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in the region, including rain and snow where applicable. 1/2 PMF is that flood represented by the flood hydrograph with ordinates equal to 1/2 the corresponding ordinates of the PMF hydrograph.
 33. "Probable maximum precipitation" means the greatest depth of precipitation for a given duration that is theoretically physically possible over a particular size storm area at a particular geographical location at a particular time of year.
 34. "Reservoir" means any basin that contains or is capable of containing water or other liquids impounded by a dam.
 35. "Residual freeboard" means the vertical distance between the highest water surface elevation during the inflow design flood and the lowest point at the top of the dam.
 36. "Restricted storage" means a condition placed on a license by the Director to reduce the storage level of a reservoir because of a safety deficiency.
 37. "Saddle dike or saddle dam" means any dam constructed in a topographically low area on the perimeter of a reservoir, required to contain the reservoir at the highest water surface elevation.
 38. "Safe" means that a dam has sufficient structural integrity and flood routing capacity to make failure of the dam unlikely.
 39. "Safe storage level" means the maximum reservoir water surface elevation at which the Director determines it is safe to impound water or other liquids in the reservoir.
 40. "Safety deficiency" means a condition at a dam that impairs or adversely affects the safe operation of the dam.
 41. "Safety inspection" means an investigation by an engineer or a person under the direction of an engineer to assess the safety of a dam and determine the safe storage level for a reservoir, which includes review of design reports, construction documents, and previous safety inspection reports of the dam, spillways, outlet facilities, seepage control and measurement systems, and permanent monument or monitoring installations.
 42. "Spillway crest" means the highest elevation of the floor of the spillway along a centerline profile through the spillway.
 43. "Storage capacity" means the maximum volume of water, sediment, or debris that can be impounded in the reservoir with no discharge of water, including the situation where an uncontrolled outlet becomes plugged. The storage capacity is reached when the water level is at the crest of the emergency spillway, or at the top of permanently mounted emergency spillway gates in the closed position. Storage capacity excludes dead storage below the natural ground surface.

44. "Surcharge storage" means the additional water storage volume between the emergency spillway crest or closed gates, and the top of the dam.
45. "Total freeboard" means the vertical distance between the emergency spillway crest and the top of the dam.
46. "Unsafe" means that safety deficiencies in a dam or spillway could result in failure of the dam with subsequent loss of human life or significant property damage.

Historical Note

Adopted effective November 2, 1978 (Supp. 78-6). Former Section R12-15-02 renumbered without change as Section R12-15-1202 effective October 8, 1982 (Supp. 82-5). Section repealed; new Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2). Amended to correct typographical error under A.A.C. R1-1-109 (Supp. 01-2).

R12-15-1203. Exempt Structures

The following structures are exempt from regulation by the Department:

1. Any artificial barrier identified as exempt on Table 1 and defined as follows:
 - a. Less than 6 feet in height, regardless of storage capacity.
 - b. Between 6 and 25 feet in height with a storage capacity of less than 50 acre-feet.
 - c. Greater than 25 feet in height with 15 acre-feet or less of storage capacity.
2. A dam owned by the federal government. A dam designed by the federal government for any non-federal

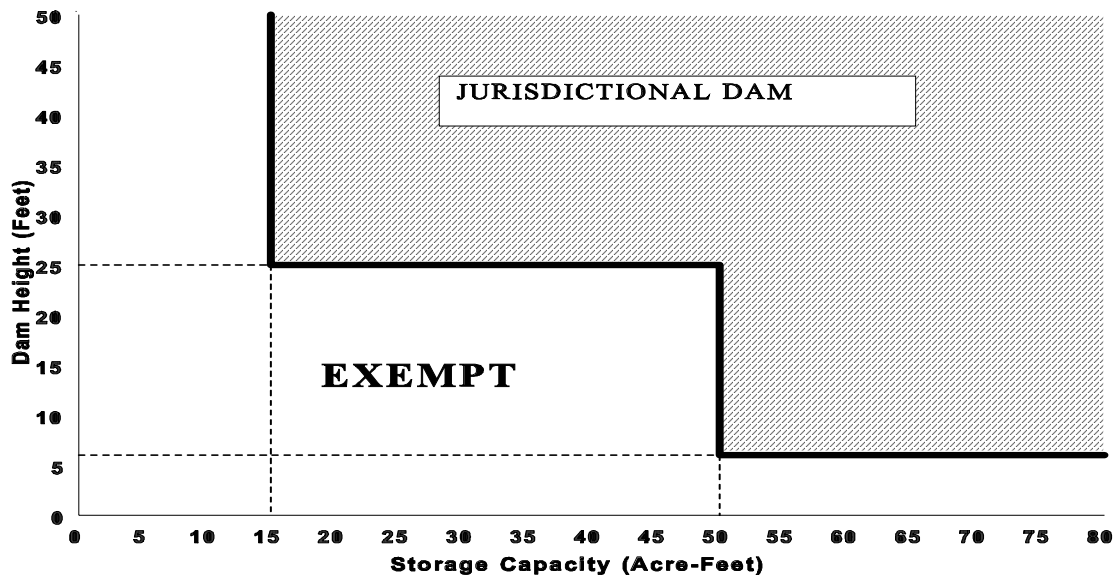
entity or person that will subsequently be owned or operated by a person or entity defined as an owner in A.R.S. § 45-1201 is subject to jurisdiction, beginning with design and construction of the dam.

3. A dam owned or operated by an agency or instrumentality of the federal government, if a dam safety program at least as stringent as this Article is applicable to and enforced against the agency or instrumentality.
4. A transportation structure such as a highway, road, or railroad fill that exists solely for transportation purposes. A transportation structure designed, constructed, or modified with the intention of impounding water on an intermittent or permanent basis and meeting the definition of dam in A.R.S. § 45-1201 is subject to jurisdiction.
5. A levee constructed adjacent to or along a watercourse, primarily to control floodwater.
6. A self-supporting concrete or steel water storage tank.
7. An impoundment for the purpose of storing liquid-borne material.
8. A release-contained barrier as defined by A.R.S. § 45-1201(5).

Historical Note

Adopted effective November 2, 1978 (Supp. 78-6). Former Section R12-15-03 renumbered without change as Section R12-15-1203 effective October 8, 1982 (Supp. 82-5). Section repealed; new Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

Table 1. Exempt Structures



Historical Note

New Table adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1204. Provision for Guidelines

The Department may develop and adopt substantive policy statements that serve as dam safety guidelines to aid a dam owner or engineer in complying with this Article. The Department recommends that dam owners and engineers consult design guidelines published by agencies of the federal government, including the U.S. Bureau of Reclamation, the U.S. Army Corps of Engineers, the Natural Resources Conservation Service, and the Federal Energy Regulatory Commission, for the design of concrete, roller compacted concrete, stone masonry, timber, inflatable rubber, and mechanically-stabilized earth dams. The Director may require that other criteria be used or revise any of the specific criteria for the purpose of dam safety. An owner shall obtain advance approval by the Director of design criteria.

Historical Note

Adopted effective November 2, 1978 (Supp. 78-6).
Former Section R12-15-04 renumbered without change as Section R12-15-1204 effective October 8, 1982 (Supp. 82-5). Section repealed; new Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1205. General Responsibilities

- A.** Each owner is responsible for the safe design, operation, and maintenance of a dam. The owner shall operate, maintain, and regularly inspect a dam so that it does not constitute a danger to human life or property. The owner of a high or significant hazard potential dam shall provide timely warning to the Department and all other persons listed in the emergency action plan of problems at the dam. The owner shall develop and maintain effective emergency action plans and coordinate those plans with local officials as prescribed in R12-15-1221.
- B.** The owner shall conduct frequent observation of the dam, as prescribed in the emergency action plan and as follows:
 - 1. The owner shall increase the frequency of observation when the reservoir is full, during heavy rains or flooding, and following an earthquake.
 - 2. The owner shall report to the Director any condition that threatens the safety of the dam as prescribed in R12-15-1224(A). The owner shall make the report as soon as possible, but not later than 12 hours after discovery of the conditions.
 - 3. If dam failure appears imminent, the owner shall notify the county sheriff or other emergency official immediately.
 - 4. The owner is responsible for the safety of the dam and shall take action to lower the reservoir if it appears that the dam has weakened or is in danger of failing.
- C.** The owner of a dam shall install, maintain, and monitor instrumentation to evaluate the performance of the dam. The Director shall require site-specific instrumentation that the Director deems necessary for monitoring the safety of the dam when failure may endanger human life and property. Conditions that may require monitoring include land subsidence, earth fissures, embankment cracking, phreatic surface, seepage, and embankment movements.
- D.** The owner shall perform timely maintenance and ordinary repair of a dam. The owner shall implement an annual plan to inspect the dam and accomplish the maintenance and ordinary repairs necessary to protect human life and property.
- E.** If a change of ownership of a dam occurs, the new owner shall notify the Department within 15 days after the date of the transaction and provide the mailing address and telephone number where the new owner can be contacted. Within 90 days after the date of the transaction, the new owner shall provide the name and telephone number of the individual or indi-

viduals who are responsible for operating and maintaining the dam.

Historical Note

Adopted effective November 2, 1978 (Supp. 78-6).
Former Section R12-15-05 renumbered without change as Section R12-15-1205 effective October 8, 1982 (Supp. 82-5). Section repealed; new Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1206. Classification of Dams

- A.** Size Classification. Dams are classified by size as small, intermediate, or large. Size is determined with reference to Table 2. An owner or engineer shall determine size by storage capacity or height, whichever results in the larger size.
- B.** Hazard Potential Classification
 - 1. The Department shall base hazard potential classification on an evaluation of the probable present and future incremental adverse consequences that would result from the release of water or stored contents due to failure or improper operation of the dam or appurtenances, regardless of the condition of the dam. The evaluation shall include land use zoning and development projected for the affected area over the 10 year period following classification of the dam. The Department considers all of the following factors in hazard potential classification: probable loss of human life, economic and lifeline losses, and intangible losses identified and evaluated by a public resource management or protection agency.
 - a. The Department bases the probable incremental loss of human life determination primarily on the number of permanent structures for human habitation that would be impacted in the event of failure or improper operation of a dam. The Department considers loss of human life unlikely if:
 - i. Persons are only temporarily in the potential inundation area;
 - ii. There are no residences or overnight campsites; and
 - iii. The owner has control of access to the potential inundation area and provides an emergency action plan with a process for warning in the event of a dam failure or improper operation of a dam.
 - b. The Department bases the probable economic, lifeline, and intangible loss determinations on the property losses, interruptions of services, and intangible losses that would be likely to result from failure or improper operation of a dam.
 - 2. The 4 hazard potential classification levels are very low, low, significant, and high, listed in order of increasing probable adverse incremental consequences, as prescribed in Table 3. The Director shall classify intangible losses by considering the common or unique nature of features or habitats and temporary or permanent nature of changes.
 - a. Very Low Hazard Potential. Failure or improper operation of a dam would be unlikely to result in loss of human life and would produce no lifeline losses and very low economic and intangible losses. Losses would be limited to the 100 year floodplain or property owned or controlled by the dam owner under long-term lease. The Department considers loss of life unlikely because there are no residences or overnight camp sites.

- b. Low Hazard Potential. Failure or improper operation of a dam would be unlikely to result in loss of human life, but would produce low economic and intangible losses, and result in no disruption of life-line services that require more than cosmetic repair. Property losses would be limited to rural or agricultural property, including equipment, and isolated buildings.
 - c. Significant Hazard Potential. Failure or improper operation of a dam would be unlikely to result in loss of human life but may cause significant or high economic loss, intangible damage requiring major mitigation, and disruption or impact on lifeline facilities. Property losses would occur in a predominantly rural or agricultural area with a transient population but significant infrastructure.
 - d. High Hazard Potential. Failure or improper operation of a dam would be likely to cause loss of human life because of residential, commercial, or industrial development. Intangible losses may be major and potentially impossible to mitigate, critical lifeline services may be significantly disrupted, and property losses may be extensive.
3. An applicant shall demonstrate the hazard potential classification of a dam before filing an application to construct. The Department shall review the applicant's demonstration early in the design process at pre-application meetings prescribed in R12-15-1207(D).
 4. The Department shall review the hazard potential classification of each dam during each subsequent dam safety inspection and revise the classification in accordance with current conditions.

Historical Note

Adopted effective November 2, 1978 (Supp. 78-6).
Former Section R12-15-06 renumbered without change as Section R12-15-1206 effective October 8, 1982 (Supp. 82-5). Section repealed; new Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

Exhibit A. Repealed**Historical Note**

Exhibit repealed by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000; a Historical Note for Exhibit A did not exist before this date (Supp. 00-2).

Table 2. Size Classification

Category	Storage Capacity (acre-feet)	Height (feet)
Small	50 to 1,000	25 to 40
Intermediate	greater than 1,000 and not exceeding 50,000	higher than 40 and not exceeding 100
Large	greater than 50,000	higher than 100

Historical Note

New Table adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

Table 3. Downstream Hazard Potential Classification

Hazard Potential Classification	Probable Loss of Human Life	Probable Economic, Life-line, and Intangible Losses
Very Low	None expected	Economic and lifeline losses limited to owner's property or 100-year floodplain. Very low intangible losses identified.
Low	None expected	Low
Significant	None expected	Low to high
High	Probable - One or more expected	Low to high (not necessary for this classification)

Historical Note

New Table adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1207. Application Process

- A. An applicant shall obtain written approval from the Director before constructing, reconstructing, repairing, enlarging, removing, altering, or breaching a dam. Application requirements differ according to the hazard potential of the dam.
 1. To construct, reconstruct, repair, enlarge, or alter a high or significant hazard potential dam, the applicant shall comply with R12-15-1208.
 2. To breach or remove a high or significant hazard potential dam, the applicant shall comply with R12-15-1209.
 3. To construct, reconstruct, repair, enlarge, alter, breach, or remove a low hazard potential dam, the applicant shall comply with R12-15-1210.
 4. To construct, reconstruct, repair, enlarge, alter, breach, or remove a very low hazard potential dam, the applicant shall comply with R12-15-1211.
- B. An application shall not be filed with the Director under the following circumstances:
 1. The dam is exempt under R12-15-1203;
 2. A dam owner starts repairs to an existing dam that are necessary to safeguard human life or property and the Director is notified without delay;
 3. The owner performs general maintenance or ordinary repairs as prescribed in R12-15-1217(A) or (B); or
 4. Breach, removal, or reduction of a very low hazard dam as prescribed in R12-15-1211(C).
- C. An applicant is not required to comply with a requirement in this Article if the Director finds that, considering the site characteristics and the proposed design, the requirement is unduly burdensome or expensive and is not necessary to protect human life or property. The Director shall consider the size, hazard potential classification, physical site conditions, and applicability of a requirement to a proposed dam. The Director shall state in writing the reason or reasons the applicant is not required to comply with a requirement.
- D. An applicant shall schedule pre-application conferences with the Department to discuss the requirements of this Article and to resolve issues essential to the design of a dam while the design is in preliminary stages. The Director shall view the dam site during the pre-application process. The following are examples of issues for pre-application conferences: the hazard potential classification, the approximate inflow design flood,

the basic design concepts, and any requirements that may be found by the Director to be unduly burdensome or expensive and not necessary to protect human life or safety. In addition, the applicant may submit preliminary design calculations to the Department for review and comment. The Department shall comment as soon as practicable, depending on the size of the submittal and the current workload.

E. The Department shall review applications as follows:

1. Applications will be received by appointment. During this meeting the Department shall make a brief review of the application to determine that the application contains each of the items required by R12-15-1208, R12-15-1209, R12-15-1210, or R12-15-1211.
2. Following receipt of an application submitted under R12-15-1208, R12-15-1209, R12-15-1210, or R12-15-1211, the Director shall complete an administrative review as prescribed in R12-15-401(1) and notify the applicant in writing whether the application is administratively complete. If the application is not administratively complete, the notification shall include a list of additional information that is required to complete the application.
3. After finding the application submitted under R12-15-1208, R12-15-1209, R12-15-1210, or R12-15-1211 administratively complete, the Director shall complete a substantive review as prescribed in R12-15-401(3) and notify the applicant in writing of the Director's approval or disapproval. If during this review period, the Director determines that there are defects in the application that would impact human life and property, a written notice of the defects shall be sent to the applicant.
4. An applicant may request in writing that the Director expedite the review of an application by employing an expert consultant on a contract basis under A.R.S. § 45-104(D). The Director shall establish on-call contracts with expert consultants to facilitate the process of expediting review. The Director may retain a consultant to review all or a portion of the application as necessary to expedite the process in response to an owner's request or to comply with time-frame rules. Before conducting the review, the consultant shall provide the Director and the applicant with a proposed time schedule and cost estimate. If the applicant agrees to the consultant's proposal for an expedited review of an application and the Director employs the consultant, the applicant shall pay to the Department the cost of the consultant's services in addition to the application fees. The Director retains the authority to review and approve, disapprove, or modify the findings and recommendations of the consultant.
5. The Director shall not approve an application in less than 10 days from the date of receipt.
6. If the Director disapproves the application, the Director shall provide the applicant with a statement of the Director's objections.
7. If the Director approves an application, the applicant shall submit in triplicate revised drawings and specifications that incorporate any required changes.
 - a. The Director shall return to the applicant 1 set of final construction drawings and specifications with the Department's approval stamp to be retained onsite during construction;
 - b. The Director shall retain for permanent state record 1 set of final construction drawings and specifications with the Department's approval stamp; and
 - c. The Director shall retain for use by the Department during construction the 3rd set of final construction

drawings and specifications with the Department's approval stamp.

8. The Director shall impose conditions and limitations that the Director deems necessary to safeguard human life and property. Examples of the conditions of approval include but are not limited to:

- a. The applicant shall not cover the foundation or abutment with the material of the dam until the Department has been given notice and a reasonable time to inspect and approve them.
- b. The applicant shall start construction within 1 year from the date of approval.
- c. The applicant shall maintain a safe storage level for an existing dam being reconstructed, repaired, enlarged, altered, or breached.

F. An approval to construct a new dam or repair, enlarge, alter, breach, or remove an existing dam is valid for 1 year.

1. If construction does not begin within 1 year, the approval is void.
2. Upon written request and good cause shown by the owner, the time for commencing construction may be extended. An applicant shall not start construction before the Director reviews the application for changes and grants approval.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1208. Application to Construct, Reconstruct, Repair, Enlarge, or Alter a High or Significant Hazard Potential Dam

- A.** An application package to construct, reconstruct, repair, enlarge, or alter a high or significant hazard potential dam shall include the following prepared by or under the supervision of an engineer as defined in R12-15-1202(11).
1. A completed application filed in duplicate on forms provided by the Director.
 2. A design information summary or checklist of items prepared in duplicate on forms provided by the Director.
 3. An initial application fee based on the total estimated project cost and computed in accordance with A.R.S. § 45-1204 and R12-15-151(B)(11).
 4. A detailed estimate of project costs. Project costs are all costs associated with construction of the dam and appurtenant works including preliminary investigations and surveys, engineering design, supervision of construction, and any other engineering costs.
 5. Two complete sets of construction drawings as prescribed in R12-15-1215(1).
 6. Two complete sets of construction specifications as prescribed in R12-15-1215(2).
 7. An engineering design report that includes information needed to evaluate all aspects of the design of the dam and appurtenances, including references with page numbers to support any assumptions used in the design, as prescribed in R12-15-1215(3). The engineering design report shall recommend a safe storage level for existing dams being reconstructed, repaired, enlarged, or altered.
 8. A construction quality assurance plan describing all aspects of construction supervision.
 9. A description of the use for the impounded or diverted water, proof of a right to appropriate, and a permit to store water as prescribed in A.R.S. §§ 45-152 and 45-161.
 10. A long-term budget plan and evidence of financing, prepared using customary accounting principles, that demonstrate that the applicant has the financial capability to construct, operate, and maintain the dam in a safe man-

ner. If the applicant does not have evidence that can be verified by an independent audit of the financial capability to construct, operate, and maintain the dam in a safe manner, the Director may require a performance bond for the entire cost of the proposed construction work.

B. The following may be submitted with the application or during construction.

1. An emergency action plan as prescribed in R12-15-1221.
2. An operation and maintenance plan to accomplish the annual maintenance.
3. An instrumentation plan regarding instruments that evaluate the performance of the dam.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1209. Application to Breach or Remove a High or Significant Hazard Potential Dam

A. An applicant shall excavate the dam down to the level of the natural ground at the maximum section. Upon approval of the Director, additional breaches may be made. This provision shall not be construed to require more than total removal of the dam regardless of the flood magnitude. The breach or breaches shall be of sufficient width to pass the greater of:

1. The 100 year flood at a depth of less than 5 feet, or
2. The 100 year flood at a normal flood depth of not more than 2 feet at a distance of 2,000 feet downstream of the dam.

B. The sides of each breach shall be excavated to a slope ratio that is stable and not steeper than 1 horizontal to 1 vertical.

C. Each breach shall be designed to prevent silt that has previously been deposited on the reservoir bottom and the excavated material from the breach from washing downstream.

D. Before breaching the dam, the reservoir shall be emptied in a controlled manner that will not endanger lives or damage downstream property. The applicant shall obtain approval from the Director for the method of breaching or removal.

E. An application package to breach or remove a high or significant hazard potential dam shall include the following prepared by or under the supervision of an engineer as defined in R12-15-1202(11).

1. The construction drawing or drawings for the breach or removal of a dam, including the location, dimensions, and lowest elevation of each breach.
2. A long-term budget plan and evidence of financing, prepared using customary accounting principles, that demonstrate that the applicant has the financial capability to breach or remove the dam in a safe manner. If the applicant does not have evidence that can be verified by an independent audit of the financial capability to breach or remove the dam in a safe manner, the Director may require a performance bond for the entire cost of the proposed construction work.
3. A construction quality assurance plan describing all aspects of construction supervision.

F. Reduction of a high or significant downstream hazard potential dam to nonjurisdictional size may be approved by letter under the following circumstances:

1. The owner shall submit a completed application form and construction drawings for the reduction and the appropriate specifications, prepared by or under the supervision of an engineer as defined in R12-15-1202(11).
2. The construction drawings and specifications shall contain sufficient detail to enable a contractor to bid on and complete the project.

3. The plans shall comply with all requirements of this Section except that the breach is not required to be to natural ground.

4. Upon completion of an alteration to nonjurisdictional size, the engineer shall file as constructed drawings and specifications with the Department.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1210. Application to Construct, Reconstruct, Repair, Enlarge, Alter, Breach, or Remove a Low Hazard Potential Dam

A. An application package to construct, reconstruct, repair, enlarge, or alter a low hazard potential dam shall include the following prepared by or under the supervision of an engineer as defined in R12-15-1202(11).

1. A completed application filed in duplicate on forms provided by the Director.
2. An initial application fee based on the total estimated project cost, computed in accordance with A.R.S. § 45-1204 and R12-15-151(B)(11).
3. A detailed estimate of project costs. Project costs are all costs associated with construction of the dam and appurtenant works, including preliminary investigations and surveys, engineering design, supervision of construction, and any other engineering costs.
4. The seal and signature of the responsible engineer in accordance with A.A.C. R4-30-304.
5. A statement by the responsible engineer that classifies the dam as low hazard in accordance with R12-15-1206(B). The responsible engineer shall submit a map of the area that would be inundated by failure or improper operation of the dam. The responsible engineer shall demonstrate that failure or improper operation of the dam would be unlikely to result in:
 - a. Loss of human life. The demonstration may be based on an emergency action plan for persons who may be in the area of inundation;
 - b. Significant incremental adverse consequences; or
 - c. Significant intangible losses, as defined in R12-15-1202(21) and identified and evaluated by a public natural resource management or protection agency.
6. Two complete sets of construction drawings as prescribed by R12-15-1215(1).
7. Two complete sets of construction specifications as prescribed by R12-15-1215(2).
8. An engineering design report that includes information needed to evaluate all aspects of the design of the dam and appurtenances, including references with page numbers to support any assumptions used in the design, as prescribed in R12-15-1215(3).
9. A construction quality assurance plan clearly describing all aspects of construction supervision.
10. A long-term budget plan and evidence of financing, prepared using customary accounting principles, that demonstrate that the applicant has the financial capability to construct, operate, and maintain the dam in a safe manner. If the applicant does not have evidence that can be verified by an independent audit of the financial capability to construct, operate, and maintain the dam in a safe manner, the Director may require a performance bond for the entire cost of the proposed construction work.

B. An application package for the breach or removal of a low hazard potential dam shall include the following.

1. A completed application filed in duplicate on forms provided by the Director that contains the following information:
 - a. The name and address of the owner of the dam or the agent of the owner.
 - b. A description of the proposed removal.
 - c. The proposed time for beginning and completing the removal.
 2. An initial application fee based on the total estimated project cost and computed in accordance with A.R.S. § 45-1204 and R12-15-151(B)(11).
 3. A statement by the responsible engineer demonstrating both of the following:
 - a. That the dam will be excavated to the level of natural ground at the maximum section; and
 - b. That the breach or breaches will be of sufficient width to pass the greater of:
 - i. The 100 year flood at a depth of less than 5 feet, or
 - ii. The 100 year flood at a normal flood depth of not more than 2 feet at a distance of 2,000 feet downstream of the dam.
 - iii. Subsection (b) shall not be construed to require more than a total removal of the dam regardless of flood magnitude.
 - c. That the sides of the breach will be excavated to a slope ratio that is stable and not steeper than 1 horizontal to 1 vertical.
 4. A detailed estimate of project costs. Project costs are all costs associated with the removal of the dam and appurtenant works, including preliminary investigations and surveys, engineering design, supervision of removal, and any other engineering costs.
- C.** An applicant intending to reduce a low hazard potential dam to nonjurisdictional size shall submit a written notice to the Director at least no less than 60 days before the date that construction begins.
- D.** Within 45 days after receipt of a complete application package as prescribed by subsection (A) or (B), the Director shall either:
1. Determine that the dam falls within the low hazard potential classification; or
 2. Issue a written notice that the dam does not fall within the low hazard potential classification.
- E.** The Director's determination that the proposed dam does not fall within the low hazard classification is an appealable agency action and subject to administrative and judicial review under A.R.S. Title 41, Chapter 6, Article 10.
- F.** Upon completion of construction, the owner shall notify the Department in writing. The owner shall not use the dam or reservoir before issuance of a license unless the Director issues written approval.
- G.** Within 90 days after completing construction, reconstruction, repair, enlargement, or alteration of a low hazard potential dam, the owner shall file the following:
1. An affidavit showing the actual cost of construction, reconstruction, repair, enlargement, or alteration of the dam. The owner shall submit a detailed accounting of the costs, including all engineering costs.
 2. An additional fee or refund request computed in accordance with A.R.S. § 45-1209 and R12-15-151(B)(11), based on the actual cost of construction, reconstruction, repair, enlargement, or alteration.
 3. A brief completion report summarizing the salient features of the project, including a description of the causes for any changes or deviations from the approved application package prepared by the engineer who supervised the construction, in accordance with A.R.S. Title 32, Chapter 1. The engineer shall indicate:
 - a. That the dam has been designed and constructed in compliance with basic principles of dam construction currently being practiced in the industry;
 - b. That the dam as constructed has structural integrity and flood routing capacity consistent with its hazard potential classification; and
 - c. That the as constructed drawings and the report accurately represent the construction of the dam.
 4. As constructed drawings prepared and sealed by the engineer who supervised the construction. The owner and the engineer shall maintain a record of the drawings.
- H.** Upon receiving the Director's written approval, the owner may operate the dam and appurtenant works. Within 30 days after receipt of the information in subsection (G), the Director shall issue to the owner either a license or a notice that the dam and appurtenant works shall not be operated because the dam and appurtenant works do not qualify as low hazard or were not built according to the submitted design. The license shall include conditions of operation, including:
1. The safe storage level of the reservoir;
 2. A requirement that the dam be operated and maintained so that it does not constitute a danger to human life and property;
 3. A requirement that the conditions resulting in the low hazard classification be maintained throughout the life of the dam; and
 4. A requirement that the owner demonstrate in writing the low hazard classification in the manner prescribed by subsection (A)(5) every 5 years.
- I.** Within 90 days after completing removal of a low hazard potential dam, the owner shall file the following. The Director shall remove the dam from jurisdiction upon approval of the submittal.
1. An affidavit showing the actual cost of removal of the dam. The owner shall submit a detailed accounting of the costs, including all engineering costs.
 2. An additional fee or refund request computed in accordance with A.R.S. § 45-1209 and R12-15-151(B)(11) based on the actual cost of removal.
 3. A brief completion report, including a description of the causes for any changes or deviations from the approved application package prepared by the engineer who supervised the construction, in accordance with A.R.S. Title 32, Chapter 1. The engineer shall certify that the as removed drawings and the report accurately represent the actual removal of the dam.
 4. As-removed drawings prepared and sealed by the engineer who supervised the removal. The owner and the engineer shall maintain a record of the drawings.
- J.** An owner shall immediately commence repairs necessary to safeguard human life and property and prevent failure and improper operation of a low hazard potential dam. The owner shall notify the Department as soon as reasonably possible and in all cases within 10 days of commencing the required repairs.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1211. Application to Construct, Reconstruct, Repair, Enlarge, Alter, Breach, or Remove a Very Low Hazard Potential Dam

- A.** An application package to construct, reconstruct, repair, enlarge, or alter a very low hazard potential dam shall include the following prepared by an engineer or a person under the supervision of an engineer as defined in R12-15-1202(11).
1. A completed application filed in duplicate on forms provided by the Director that contains the following information:
 - a. The name and address of the owner of the dam or the agent of the owner.
 - b. The location, type, size, and height of the proposed dam and appurtenant works.
 - c. The storage capacity of the reservoir associated with the proposed dam.
 - d. The proposed time for beginning and completing construction.
 - e. A description of the use for the impounded or diverted water and proof of a right to impound that water.
 2. The means, plans, and specifications by which the stream or body of water is to be dammed, by-passed, or controlled during construction.
 3. Maps, drawings, and specifications of the proposed dam.
 4. An initial application fee based on the total estimated project cost and computed in accordance with A.R.S. § 45-1204 and R12-15-151(B)(11).
 5. A detailed estimate of project costs. Project costs are all costs associated with construction of the dam and appurtenant works, including preliminary investigations and surveys, engineering design, supervision of construction, and any other engineering costs.
 6. A statement by the responsible engineer that classifies the dam as very low hazard in accordance with R12-15-1206(B). The responsible engineer shall submit a map of the area that would be inundated by failure or improper operation of the dam. The responsible engineer shall demonstrate that failure or improper operation would be unlikely to result in:
 - a. Loss of human life. The demonstration may be based on an emergency action plan for persons who may be in the area of inundation;
 - b. Significant incremental adverse consequences; or
 - c. Significant intangible losses, as defined in R12-15-1202(21) and identified and evaluated by a public natural resource management protection agency, because the dam has a size classification of either small or intermediate under R12-15-1206(A) and any release would be limited to the 100 year floodplain or property owned or controlled by the dam owner under long-term lease.
 7. The seal and signature of the responsible engineer in accordance with A.R.S. Title 32, Chapter 1.
 8. The drawings required by subsection (A)(3) shall include a plan view and maximum section of the dam; the outlet works; and the spillway plan, profile, and cross section.
 9. The specifications required by subsection (A)(3) shall include the construction materials, testing criteria, and installation techniques.
- B.** The Director may make other requirements for drawings and specifications for the proposed repair or alteration of a very low hazard potential dam. In determining other requirements, the Director shall consider the size and extent of the repair or alteration, the portions of the dam that will be repaired or altered, and whether the requirements elicit a description of the proposed construction work that is adequate to allow the Director to evaluate the repair or alteration.
- C.** An owner intending to breach, remove, or reduce a very low hazard potential dam to nonjurisdictional size shall submit written notice to the Director at least 60 days before the date that construction begins.
- D.** After receipt of a complete application package as prescribed by subsection (A), the Director shall either:
1. Determine that the dam falls within the very low hazard classification and approve the application in writing; or
 2. Issue a written notice that the dam does not fall within the very low hazard classification.
- E.** The Director's determination that the proposed dam does not fall within the very low hazard classification is an appealable agency action and subject to administrative and judicial review under A.R.S. Title 41, Chapter 6, Article 10.
- F.** Upon completion of construction, the owner shall notify the Department in writing. The owner shall not use the dam and reservoir before receipt of a license unless the Director issues written approval.
- G.** Within 90 days after completion of the construction, reconstruction, repair, enlargement, or alteration of a very low hazard potential dam, the owner shall file the following:
1. An affidavit showing the actual cost of construction, reconstruction, repair, enlargement, or alteration of the dam. The owner shall submit a detailed accounting of the costs, including all engineering costs.
 2. An additional fee or refund request computed in accordance with A.R.S. § 45-1209 and R12-15-151(B)(11) based on the actual cost of construction, reconstruction, repair, enlargement, or alteration.
 3. A brief completion report summarizing the salient features of the project, including a description of the causes for any changes or deviations from the approved application package prepared by the engineer who supervised the construction in accordance with A.R.S. Title 32, Chapter 1. The report shall include:
 - a. That the dam has been designed and constructed in compliance with basic principles of dam construction currently being practiced in the industry;
 - b. That the dam as constructed has structural integrity and flood routing capacity consistent with its hazard potential classification; and
 - c. That the as constructed drawings and the report accurately represent the construction of the dam.
 4. As constructed drawings prepared by the engineer who supervised the construction. The owner and the engineer shall maintain a record of the drawings.
- H.** Within 30 days after receipt of the information in subsection (G), the Director shall issue to the owner either a license or a notice that the dam and appurtenant works shall not be operated because the dam and appurtenant works do not qualify as very low hazard or were not built according to the submitted design. Upon receiving the Director's written approval, the owner may operate the dam and appurtenant works. The license shall include conditions of operation, including:
1. The safe storage level of the reservoir;
 2. A requirement that the conditions resulting in the very low hazard classification be maintained throughout the life of the dam; and
 3. A requirement that the owner demonstrate in writing the very low hazard classification in the manner prescribed by subsection (A)(6) every 5 years.
- I.** An owner shall immediately commence repairs necessary to safeguard human life and property and prevent failure or improper operation of a very low hazard potential dam. The

owner shall notify the Department as soon as reasonably possible and in all cases within 10 days of commencing the required repairs.

- J. The Department may periodically inspect construction to confirm that it is proceeding according to the approved design and that proper construction quality assurance is being exercised by the owner's engineer. The owner, or the owner's engineer under the direction of the owner, shall remedy any unsatisfactory condition using the contractor.
- K. The owner shall provide the Department access to the dam site for purposes of inspecting all phases of construction, including the foundation, embankment and concrete placement, inspection and test records, and mechanical installations.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1212. Construction of a High, Significant, or Low Hazard Potential Dam

- A. Before commencement of construction activities, the owner shall invite to a pre-construction conference all involved regulatory agencies, the prime contractor, and all subcontractors. At this meeting the Department shall identify, to the extent possible, the key construction stages at which an inspection will be made. At least 48 hours before each key construction stage identified for inspection, the owner or the owner's engineer shall provide notice to the Department.
- B. The owner and the owner's engineer shall oversee construction of a new dam or reconstruction, repair, enlargement, alteration, breach, or removal of an existing dam. Failure to perform the work in accordance with the construction drawings and specifications approved by the Director renders the approval revocable. The owner's engineer shall exercise professional judgment independent of the contractor.
- C. A professional engineer with proficiency in engineering and knowledge of dam technology shall supervise or direct the supervision of construction in accordance with the construction quality assurance plan.
- D. The owner's engineer shall submit summary reports of construction activities and test results according to a schedule approved by the Department.
- E. The owner shall immediately report to the Department any condition encountered during construction that requires a deviation from the approved plans and specifications.
- F. The owner shall promptly submit a written request for approval of any necessary change and sufficient information to justify the proposed change. The owner shall not commence construction without the written approval of the Director unless the change is a minor change. A minor change is a change that complies with the requirements of this Article and provides equal or better safety performance.
- G. Upon completion of construction, the owner shall notify the Department in writing. The Department shall make a final inspection. The owner shall correct any deficiencies noted during the inspection.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1213. Completion Documents for a Significant or High Hazard Potential Dam

Within 90 days after completion of the construction or removal work for a significant or high hazard potential dam and final inspection by the Department, the owner shall file the following.

1. An affidavit showing the actual cost of the construction. The owner shall submit a detailed accounting of the costs, including all engineering costs.
2. An additional fee or refund request based on the actual cost of the construction, computed in accordance with A.R.S. § 45-1209 and R12-15-151(B)(11).
3. One set of full sized as constructed drawings prepared and sealed by the engineer who supervised the construction. If changes were made during construction, the owner shall file supplemental drawings showing the dam and appurtenances as actually constructed.
4. Construction records, including grouting, materials testing, and locations and baseline readings for permanent bench marks and instrumentation, initial surveys, and readings.
5. Photographs of construction from exposure of the foundation to completion of construction.
6. A brief completion report summarizing the salient features of the project, including a description of the causes for any changes or deviations from the approved drawings and specifications that were made during the construction phase.
7. A schedule for filling the reservoir, specifying fill rates, water level elevations to be held for observation, and a schedule for inspecting and monitoring the dam. The owner shall monitor the dam monthly during the first filling.
8. An operating manual for the dam and its appurtenant structures. The operating manual shall include a process for safety inspections prescribed in R12-15-1219. The operating manual shall include schedules for surveillance activities and baseline information for any installed instrumentation as follows:
 - a. The frequency of monitoring;
 - b. The data recording format;
 - c. A graphical presentation of data; and
 - d. The person who will perform the work.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1214. Licensing

- A. Upon review and approval of the documents filed under R12-15-1213 and finding that the construction at the dam has been completed in accordance with the approved plans and specifications and finding that the dam is safe, the Director shall issue a license. The license shall specify the safe storage level for the reservoir and shall specify conditions for the safe operation of the dam. The dam and reservoir shall not be used before issuance of a license unless the Director issues written approval. Procedures for issuance of a license for low and very low hazard potential dams are prescribed in R12-15-1210(H) and R12-15-1211(H), respectively.
- B. A new license shall be issued in the following instances:
 1. Upon change of ownership of a dam.
 2. Upon change of the safe storage level.
 3. Upon expiration of time to appeal a notice issued under R12-15-1223(B).
 4. Upon expiration of time to appeal an order issued by the Director under R12-15-1223(D).
 5. Upon expiration of time to appeal an order of a court.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1215. Construction Drawings, Construction Specifications, and Engineering Design Report for a High, Significant, or Low Hazard Potential Dam

The owner and engineer are responsible for complete and adequate design of a dam and for including in the application all aspects of the design pertaining to the safety of the dam.

1. Construction Drawing Requirements. The construction drawings required by R12-15-1208(5), R12-15-1209(E)(1), and R12-15-1210(A)(6) shall include the following:
 - a. The seal and signature of the responsible engineer in accordance with A.A.C. R4-30-304.
 - b. One or more topographic maps of the dam, spillway, outlet works, and reservoir on a scale large enough to accurately locate the dam and appurtenances, indicate cut and fill lines, and show the property lines and ownership status of the land. Contour intervals shall be compatible with the height and size of the dam and its appurtenances and shall show design and construction details.
 - c. A reservoir area and capacity curve that reflect area in acres and capacity in acre-feet in relation to depth of water and elevation in the reservoir. The construction drawings shall show the spillway invert and top of dam elevations. The construction drawings shall also show the reservoir volume and space functional allocations. The construction drawings may include alternate scales as required for the owner's use.
 - d. Spillway and outlet works rating curves and tables at a scale or scales that allow determination of discharge rate in cubic feet per second at both low and high flows as measured by depth of water passing over the spillway control section.
 - e. A location map showing the dam footprint and all exploration drill holes, test pits, trenches, adits, borrow areas, and bench marks with elevations, reference points, and permanent ties. This map shall use the same vertical and horizontal control as the topographic map.
 - f. Geologic information including 1 or more geologic maps, profile along the centerline, and other pertinent cross sections of the dam site, spillway or spillways, and appurtenant structures, aggregate and material sources, and reservoir area at 1 or more scales compatible with the site and geologic complexity, showing logs of exploration drill holes, test pits, trenches, and adits.
 - g. One or more plans of the dam to delineate design and construction details.
 - h. Foundation profile along the dam centerline at a true scale where the vertical scale is equal to the horizontal scale, showing the existing ground and proposed finished grade at cut and fill elevations, including anticipated geologic formations. The foundation profile shall include any proposed grout and drain holes.
 - i. Profile and a sufficient number of cross sections of the dam to delineate design and construction details. The drawings shall illustrate and show dimensions of camber, details of the top, core zone, interior filters and drains, and other zone details. The profile of the dam may be drawn to different horizontal and vertical scales if required for detail. A maximum section of the dam shall be drawn to a true scale, where the vertical scale is equal to the horizontal scale. The outlet conduit may be shown on the maximum section if this is typical of the proposed construction.
 - j. One or more dam foundation plans showing excavation grades and cut slopes with any proposed foundation preparation, grout and drain holes, and foundation dewatering requirements.
 - k. Plan, profile, and details of the outlet works, including the intake structure, the gate system, conduit, trashrack, conduit filter diaphragm, conduit concrete encasement, and the downstream outlet structure. The drawings shall include all connection and structural design details.
 - l. Plan, profile, control section, and cross sections of the spillway, including details of any foundation preparation, grouting, or concrete work that is planned. A complex control structure, a concrete chute, or an energy dissipating device for a terminal structure shall include both hydraulic and structural design details.
 - m. Hydrologic data, drainage area and flood routing, and diversion criteria.
2. Construction Specification Requirements. The construction specifications required by R12-15-1208(6) and R12-15-1210(A)(7) shall include the following:
 - a. The seal and signature of the responsible engineer in accordance with A.A.C. R4-30-304.
 - b. The statement that the construction drawings and specifications shall not be materially changed without the prior written approval of the Director.
 - c. A detailed description of the work to be performed and a statement of the requirements for the various types of materials and installation techniques that will enter into the permanent construction.
 - d. The statement that construction shall not be considered complete until the Director has approved the construction in writing.
 - e. The statement that the owner's engineer shall control the quality of construction.
 - f. The following construction information:
 - i. All earth and rock material descriptions, placement criteria, and construction requirements for all elements of the dam and related structures.
 - ii. All concrete, grout, and shotcrete material and mix descriptions, placement and consolidation criteria, temperature controls, and construction requirements for all elements of the dam and related structures.
 - iii. Material criteria and material testing, cleaning, and treatment. If foundation or curtain grouting is required, the specifications shall describe the type of grout, grouting method, special equipment necessary, recording during grouting, and foundation monitoring to avoid disturbance from grouting.
 - iv. All materials testing that will be performed by the contractor for pre-qualification of materials, including special performance testing, such as water pressure tests in conduits. The Director shall accept materials that are pre-tested successfully and constructed in-place in accordance with specifications.
 - v. A plan for control or diversion of surface water during construction. The design engineer may determine frequency of storm runoff to be controlled during construction, commensurate with the risk of economic loss during construction.

- vi. Criteria for blast monitoring and acceptable blast vibration levels, including particle velocities for the dam and other critical appurtenances. Monitoring equipment and monitoring locations shall be specified.
 - vii. Instrumentation material descriptions, placement criteria, and construction requirements and a statement that instrumentation shall be installed by experienced speciality subcontractors.
3. Engineering Design Report Requirements. The engineering design report required by R12-15-1208(7) and R12-15-1210(A)(8) shall include the following:
- a. The seal and signature of the responsible engineer in accordance with A.A.C. R4-30-304.
 - b. The classification under R12-15-1206 of the proposed dam, or for the proposed enlargement of an existing dam or reservoir.
 - c. Hydrologic considerations, including calculations and a summary table of data used in determining the required emergency spillway capacity and freeboard, and design of any diversion or detention structures. The design report shall include input and output listings on both hard copy and computer diskette.
 - d. Hydraulic characteristics, engineering data, and calculations used in determining the capacities of the outlet works and emergency spillway. The design report shall include input and output listings on both hard copy and computer diskette.
 - e. Geotechnical investigation and testing of the dam site and reservoir basin. Results and analysis of subsurface investigations, including logs of test borings and geologic cross sections.
 - f. Guidelines and criteria for blasting to be used by the contractor in preparing the blasting plan.
 - g. Details of the plan for control or diversion of surface water during construction.
 - h. Details of the dewatering plan for subsurface water during construction.
 - i. Testing results of earth and rock materials, including the location of test pits and the logs of these pits.
 - j. Discussion and design of the foundation blanket grouting, grout curtain, and grout cap based on foundation stability and seepage considerations.
 - k. Calculations and basic assumptions on loads and limiting stresses for reinforced concrete design. The design report shall include input and output listings on both hard copy and computer diskette.
 - l. A discussion and stability analysis of the dam including appropriate seismic loading, safety factors, and embankment zone strength characteristics. Analyses shall include both short-term and long-term loading on upstream and downstream slopes. The design report shall include input and output listings on both hard copy and computer diskette.
 - m. A discussion of seismicity of the project area and activity of faults in the vicinity. The design report shall use both deterministic and statistical methods and identify the appropriate seismic coefficient for use in analyses.
 - n. Discussion and design of the cutoff trench based on seepage and other considerations.
 - o. Permeability characteristics of foundation and dam embankment materials, including calculations for seepage quantities through the dam, the foundation, and anticipated in the internal drain system. The design report shall include input and output listings on both hard copy and computer diskette. The design report shall include copies of any flow nets used.
 - p. Discussion and design of internal drainage based on seepage quantity calculations. The design report shall include instrumentation necessary to monitor the drainage system and filter design calculations for protection against piping of foundation and embankment.
 - q. Erosion protection against waves and rainfall runoff for both the upstream and downstream slopes, as appropriate.
 - r. Discussion and design of foundation treatment to compensate for geological weakness in the dam foundation and abutment areas and in the spillway foundation area.
 - s. Post-construction vertical and horizontal movement systems.
 - t. Discussion of foundation conditions including the potential for subsidence, fissures, dispersive soils, collapsible soils, and sink holes.
- Historical Note**
- New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).
- R12-15-1216. Design of a High, Significant, or Low Hazard Potential Dam**
- A. General Requirements.**
- 1. Emergency Spillway Requirements. An applicant shall:
 - a. Construct each spillway in a manner that avoids flooding in excess of the flooding that would have occurred in the same location under the same conditions before construction. The owner of a dam shall demonstrate that a spillway discharge would not result in incremental adverse consequences. In determining whether a spillway discharge of a dam would result in incremental adverse consequences, the Director shall evaluate whether the owner has taken any or all of the following actions: issuing public notice to downstream property owners, complying with flood insurance requirements, adopting emergency action plans, conducting mock flood drills, acquiring flow easements or other acquisitions of real property, or other actions appropriate to safeguard the dam site and flood channel.
 - b. Include a control structure to avoid head cutting and lowering of the spillway crest for spillways excavated in soils or soft rock. In the alternative, the design may provide evidence acceptable to the Director that erosion during the inflow design flood will not result in a sudden release of the reservoir.
 - c. Provide each spillway and channel with a minimum width of 10 feet and suitable armor to prevent erosion during the discharge resulting from the inflow design flood.
 - d. Ensure that downstream spillway channel flows do not encroach on the dam unless suitable erosion protection is constructed.
 - e. Ensure that each spillway, in combination with outlets, is able to safely pass the peak discharge flow rate, as calculated on the basis of the inflow design flood.
 - f. Not construct bridges or fences across a spillway unless the construction is approved in writing by the

- Director. The Director's approval may include conditions regarding the design and operation of the spillway and fencing, based on safety concerns.
- g. Not use a pipe or culvert as an emergency spillway unless the Director approves the use following review of the dam design and site characteristics.
2. Inflow Design Flood Requirements
 - a. Unless directed otherwise in writing by the Director, the inflow design flood requirements for determining the spillway minimum capacity are stated in Table 4.
 - b. As an alternative to the requirements prescribed in Table 4, the Director may accept an inflow design flood determined by an incremental damage assessment study, based on the relative safety of the alternatives.
 - c. The Director may accept site-specific probable maximum precipitation studies in determination of the inflow design flood.
 - d. An applicant shall ensure that the total freeboard is the largest of the following:
 - i. The sum of the inflow design flood maximum water depth above the spillway crest plus wave run up.
 - ii. The sum of the inflow design flood maximum water depth above the spillway crest plus 3 feet.
 - iii. A minimum of 5 feet.
 3. Outlet Works Requirements. An applicant shall ensure that a dam has a low level outlet works that:
 - a. Is capable of draining the reservoir to the sediment pool level. A low level outlet works for a high or significant hazard potential dam shall be a minimum of 36 inches in diameter. A low level outlet works for a low hazard potential dam shall be a minimum of 18 inches in diameter.
 - b. For a high or significant hazard potential dam, has the capacity to evacuate 90% of the storage capacity of the reservoir within 30 days, excluding reservoir inflows.
 - c. Has a filter diaphragm or other current practice measures to reduce the potential for piping along the conduit.
 - d. Has accessible outlet controls when the spillway is in use.
 - e. Has an emergency manual override system or can be operated manually.
 - f. Is constructed of materials appropriate for loading condition, seismic forces, thermal expansion, cavitation, corrosion, and potential abrasion. The applicant shall not use corrugated metal pipes or other thin-walled pipes except as a form for a cast-in-place concrete conduit. The applicant shall construct outlet conduits of cast-in-place reinforced concrete. The applicant shall design each outlet to maintain water tightness. The applicant shall construct each outlet to prevent the occurrence of piping adjacent to the outlet.
 - g. Has an operating or guard gate on the upstream end of any gated outlet.
 - h. Has an outlet conduit near the base of 1 of the abutments on native bedrock or other competent material. The applicant shall support the entire length of the conduit on foundation materials of uniform density and consistency to prevent adverse differential settlement.
 - i. Has an upstream valve or gate capable of controlling the discharge through all ranges of flow on any gated outlet conduit.
 - j. Has a trashrack designed for a minimum of 25% of the reservoir head to which it would be subjected if completely clogged at the upstream end of the outlet.
 - k. Has an air vent pipe just downstream of the control gate. The applicant shall include a blow-off valve at or near the downstream toe of the dam for an outlet conduit that is connected directly to a distribution system.
 - l. Has an outlet conduit designed for internal pressure equal to the full reservoir head and for superimposed embankment loads, acting separately.
4. Dam Site And Reservoir Area Requirements
 - a. An applicant shall demonstrate that reservoir storage during the inflow design flood will not result in incremental adverse consequences and that the design will not result in the inundation or wave damage of properties within the reservoir, except marina-type structures, during the inflow design flood. In determining whether a discharge will result in incremental adverse consequences, the Director shall evaluate whether the owner has taken any or all of the following actions: issuing public notice to upstream affected property owners, complying with flood insurance requirements, adopting emergency action plans, conducting mock flood drills, acquiring flood easements or other acquisitions of real property, or other actions appropriate to safeguard the dam site and reservoir. Permanent habitations are not allowed within the reservoir below the spillway elevation.
 - b. The applicant shall clear the reservoir storage area of logs and debris.
 - c. The applicant shall place borrow areas a safe distance from the upstream toe and the downstream toe of the dam to prevent a piping failure of the dam.
 - d. The applicant shall keep the top of the dam and appurtenant structures accessible by equipment and vehicles for emergency operations and maintenance.
 5. Geotechnical Requirements
 - a. The applicant shall provide an evaluation of the static stability of the foundation, dam, and slopes of the reservoir rim and demonstrate that sufficient material is available to construct the dam as designed.
 - b. The applicant shall not construct a dam on active faults, collapsible soils, dispersive soils, sink holes, or fissures, unless the applicant demonstrates that the dam can safely withstand the anticipated offset or other unsafe effects on the dam.
 6. Seismic Requirements
 - a. The applicant shall submit a review of the seismic or earthquake history of the area around the dam within a radius of 100 miles to establish the relationship of the site to known faults and epicenters. The review shall include any known earthquakes and the epicenter locations and magnitudes of the earthquakes.
 - b. The applicant shall identify the location of active or potentially active faults that have experienced Holocene or Late Pleistocene displacement within a radius of 100 miles of the site.

- c. For a high or significant hazard potential dam, the applicant shall design the dam to withstand the maximum credible earthquake.
- d. For a low hazard potential dam, the applicant shall use probabilistic or deterministic methods to determine the design earthquake. The magnitude of the design earthquake shall vary with the size of the dam, site condition, and specific location.

B. Embankment Dam Requirements.

1. Geotechnical Requirements. Table 5 states minimum factors of safety for embankment stability under various loading conditions. For an embankment dam an applicant shall provide a written analysis of minimum factors of safety for stability.
 - a. The analysis of minimum factors of safety shall include the effects of anisotropy on the phreatic surface position by using a ratio of horizontal permeability to vertical permeability of at least 10. The Director may require ratios of up to 100 if the material types and construction techniques will cause excessive stratification.
 - b. The applicant shall use tests modeling the conditions being analyzed to determine the strengths used in the stability analysis. The stability analysis shall include total and effective stress strengths appropriate for the different material zones and conditions analyzed. The stability analysis shall use undrained strengths or strength parameters for all saturated materials.
 - c. The applicant shall perform an analysis of the upstream slope stability for a partial pool with steady seepage considering the reservoir level that provides the lowest factor of safety.
 - d. A stability analysis is not required for low hazard potential dams if the owner or the owner's engineer demonstrates that conservative slopes and competent materials are included in the design.
2. Seismic Requirements
 - a. The applicant shall determine the seismic characteristics of the site as prescribed in subsection (A)(6).
 - b. The applicant shall determine the liquefaction susceptibility of the embankment, foundation, and abutments. The applicant shall use standard penetration testing, cone penetration testing, shear wave velocity measurements, or a combination of these methods to make this determination. The applicant shall compute the minimum factor of safety against liquefaction at specific points and make a determination of whether the overall site is subject to liquefaction.
 - c. The applicant shall determine the safety of the dam under seismic loading using a pseudo static stability analysis, computing the minimum factor of safety if the embankment, foundation or abutment is not subject to liquefaction and has a maximum peak acceleration of 0.2g or less, or a maximum peak acceleration of 0.35g or less, and consists of clay on a clay or bedrock foundation. The applicant shall use in the pseudo static stability analysis a pseudo static coefficient that is at least 60% of the maximum peak bedrock acceleration at the site.
 - d. The applicant shall compute a minimum factor of safety against overtopping due to deformation and settlement in each of the following cases. The minimum factor of safety against overtopping can be no less than 2.5, determined by dividing the total pre-earthquake freeboard by the estimated vertical settlement in feet. The applicant shall determine the

total vertical settlement by adding the settlement values of the upstream and downstream slopes.

- i. The minimum factor of safety in a pseudo static analysis is less than 1.0;
 - ii. An embankment, foundation, or abutment is not subject to liquefaction, has a maximum peak acceleration of more than 0.2g or a maximum peak acceleration of more than 0.35g and consists of clay on a clay or bedrock foundation; or
 - iii. The embankment, foundation or abutment is subject to liquefaction.
 - e. The applicant shall perform a liquefaction analysis to establish approximate boundaries of liquefiable zones and physical characteristics of the soil following liquefaction for an embankment, foundation, or abutment subject to liquefaction. The applicant shall perform an analysis of the potential for flow liquefaction.
 - f. Other, more sophisticated analytical procedures may be required by the Director for sites with high seismicity or low strength embankment or foundation soils.
3. Miscellaneous Design Requirements
 - a. The design of any significant or high hazard potential dam shall provide seepage collection and prevent internal erosion or piping due to embankment cracking or other causes.
 - b. The Director shall review the filter and permeability design for a chimney drain, drain blanket, toe drain, or outlet conduit filter diaphragms on the basis of unique site characteristics.
 - i. The minimum thickness of an internal drain is 3 feet.
 - ii. The minimum width of a chimney drain is 6 feet.
 - iii. The applicant shall filter match an internal drain to its adjacent material.
 - iv. The applicant shall design internal drains with sufficient capacity for the expected drainage without the use of drainpipes using only natural granular materials.
 - c. The use of a geosynthetic is not permitted in a design if it serves as the sole defense against dam failure. The use of geotextiles and geonets as a filter or drain material or a geomembrane liner is permitted only in a location that is easily accessible for repair or if its excavation cannot create an unsafe condition at the dam. A geosynthetic liner is allowed under special conditions and in specific situations if it is subject to monitoring and redundant safety controls. The Director may impose conditions, including monitoring appropriate to the hazard classification, inspection, and necessary repairs, each performed every 5 years.
 - d. The applicant shall use armoring on any upstream slope of an embankment dam that impounds water for more than 30 days at a time. If the applicant uses rock riprap, it shall be well-graded, durable, sized to withstand wave action, and placed on a well-graded pervious sand and gravel bedding or geotextile with filtering capacity appropriate for the site.
 - e. The applicant shall protect the downstream slopes and groins of an embankment dam from erosion.
 - f. The minimum width of the top of an embankment dam is equal to the structural height of the dam

divided by 5 plus an additional 5 feet. The required minimum width for any embankment dam is 12 feet. The maximum width for any embankment dam is 25 feet.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

Table 4. Inflow Design Flood

Dam Hazard Class	Dam Size Classification	IDF Magnitude
Very Low	All Sizes	100-year
Low	All Sizes	0.25 PMF
Significant	Small Intermediate Large	0.25 PMF 0.5 PMF 0.5 PMF
High*	All Sizes	*

* For a high hazard potential dam, the applicant shall design the dam to withstand an inflow design flood that varies from .5 PMF to the full PMF, with size increasing based on persons at risk and potential for downstream damage. The applicant shall consider foreseeable future conditions.

Historical Note

New Table adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

Table 5. Minimum Factors of Safety for Stability¹

Embankment Loading Condition	Minimum Factor of Safety
End of construction case – upstream and downstream slopes	1.3
End of construction case for embankments greater than 50 feet in height on weak foundations	1.4
Steady state seepage - upstream (critical partial pool) and downstream slope (full pool)	1.5
Instantaneous drawdown - upstream slope	1.2

¹ Not applicable to an embankment on a clay shale foundation.

Historical Note

New Table adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1217. Maintenance and Repair; Emergency Actions

- A.** An owner shall perform general maintenance and ordinary repairs that do not impair the safety of the dam. General maintenance and ordinary repair activities listed under this subsection do not require prior approval of the Director. These repair activities include:
1. Removing brush or tall weeds.
 2. Cutting trees and removing slash from the embankment or spillway. Small stumps may be removed provided no excavation into the embankment occurs.
 3. Exterminating rodents by trapping or other methods. Rodent damage may be repaired provided it does not involve excavation that extends more than 2 feet into the

embankment and replacement materials are compacted as they are placed.

4. Repairing erosion gullies less than 2 feet deep on the embankment or in the spillway.
 5. Grading the surface on the top of the dam embankment or spillway to eliminate potholes and provide proper drainage, provided the freeboard is not reduced.
 6. Placing additional riprap and bedding on the upstream slope, or in the spillway in areas that have sustained minor damage and restoring the original riprap protection where the damage has not yet resulted in erosion and weakening of the dam.
 7. Painting, caulking, or lubricating metal structures.
 8. Patching or caulking spalled or cracked concrete to prevent deterioration.
 9. Removing debris, rock, or earth from outlet conduits or spillway channels and basins.
 10. Patching to prevent deterioration within outlet works.
 11. Replacing worn or damaged parts on outlet valves or controls to restore them to original condition or its equivalent.
 12. Repairing or replacing fences intended to keep traffic or livestock off the dam or spillway.
- B.** General maintenance and ordinary repair that may impair or adversely effect safety, such as excavation into or near the toe of the dam, construction of new appurtenant structures for the dam, and repair of damage that has already significantly weakened the dam shall be performed in accordance with this Article. The Director may approve maintenance performed according to a standard detail or method of repair on file with the Department upon submittal of a letter. The Director shall determine whether general maintenance and ordinary repair activities not listed in subsection (A) will impair safety.
- C.** Emergency actions not impairing the safety of the dam may be taken before guidance can be provided by an engineer and do not require prior approval of the Director. Emergency actions do not excuse an owner's responsibility to promptly undertake a permanent solution. Emergency actions include:
1. Stockpiling materials such as riprap, earth fill, sand, sandbags, and plastic sheeting.
 2. Lowering the reservoir level by making releases through the outlet or a gated spillway, by pumping, or by siphoning.
 3. Armoring eroded areas by placing sandbags, riprap, plastic sheeting, or other available material.
 4. Plugging leakage entrances on the upstream slope.
 5. Increasing freeboard by placing sandbags or temporary earth fill on the dam.
 6. Diverting flood waters to prevent them from entering the reservoir basin.
 7. Constructing training berms to control flood waters.
 8. Placing sandbag ring dikes or reverse filter materials around boils at the downstream toe to provide back pressure.
 9. Removing obstructions from outlet or spillway flow areas.
- D.** Emergency actions impairing the safety of the dam require prior approval of the Director. An owner shall not lower the water level by excavating the spillway or embankment unless failure is imminent.
- E.** For all high and significant hazard potential dams, the emergency action plan shall be implemented with any emergency actions taken at the dam.
- F.** The owner shall notify the Director immediately of any emergency condition that exists and any emergency action taken.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R.
2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1218. Safe Storage Level

The Director has the authority to determine the safe storage level for the reservoir behind each dam, including the storage level of an existing dam while it is being repaired, enlarged, altered, breached, or removed. The elevation of the safe storage level is stated on the license. The owner shall not store water in excess of the level determined by the Director to be safe. The owner shall not place flashboards or other devices in the emergency spillway without approval of an alteration of the dam in accordance with this Article.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R.
2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1219. Safety Inspections

- A.** Except as provided in subsection (E), the Director shall conduct a dam safety inspection annually or more frequently for each high hazard potential dam, triennially for each significant hazard potential dam, and once every 5 years for each low and very low hazard potential dam.
- B.** An engineer is considered qualified to provide information to the Director regarding the safe storage level of a reservoir if the engineer:
 1. Meets the criteria in R12-15-1202(11);
 2. Has 3 years of experience in the field of dam safety; and
 3. Has actual experience in conducting dam safety inspections.
- C.** A dam safety inspection includes:
 1. Review of previous inspections, reports, and drawings;
 2. Inspection of the dam, spillways, outlet facilities, seepage control, and measurement systems;
 3. Inspection of any permanent monument or monitoring installations;
 4. Assessment of all parts of the dam that are related to the dam's safety; and
 5. A recommendation regarding the safe storage level of the reservoir.
- D.** The engineer shall submit a safety inspection report that describes the findings and lists actions that will improve the safety of the dam. The report shall include the engineer's recommendation of the safe storage level. The engineer shall use a report form approved by the Director.
- E.** Inspections by the Owner
 1. An owner may provide to the Director, at the owner's expense, a safety inspection report that complies with the requirements of subsections (B), (C), and (D) in place of an inspection by the Department. The owner's engineer shall notify the Director and submit a written summary of the engineer's qualifications at least 14 days before the scheduled safety inspection.
 2. The Director may refuse to accept an inspection that does not conform to this Article.
- F.** Inspections by the Department
 1. The Director may enter at reasonable times upon private or public property and the owner shall permit such entry, where a dam is located, including a dam under construction, reconstruction, repair, enlargement, alteration, breach, or removal, for any of the following purposes:
 - a. To enforce the conditions of approval of the construction drawings and specifications related to an application for construction, reconstruction, repair, enlargement, alteration, breach, or removal.
 - b. To inspect a dam that is subject to this Article.

- c. To investigate or assemble data to aid review and study of the design and construction of dams, reservoirs, and appurtenances or make watershed investigations to facilitate decisions on public safety to fulfill the duties of A.R.S. § 45-1214.
 - d. To ascertain compliance with this Article and A.R.S. Title 45, Chapter 6.
2. Upon receipt of a complaint that a dam is endangering people or property:
 - a. The Director shall inspect the dam unless there is substantial cause to believe the complaint is without merit.
 - b. If the complainant files a complaint in writing and deposits with the Director sufficient funds to cover the costs of the inspection, the Director shall make an inspection.
 - c. The Director shall provide a written report of the inspection to the complainant and the dam owner.
 - d. If an unsafe condition is found, the Director shall cause it to be corrected and return the deposit to the complainant. If the complaint was without merit the deposit shall be paid into the general fund.
3. The Director may employ qualified on-call consultants to conduct inspections.
4. Inspections under subsection (A) shall comply with the requirements of A.R.S. § 41-1009.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R.
2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1220. Existing Dams

- A.** The requirements of this Article apply to existing dams, except as provided in subsections (B) and (C).
- B.** If the Director has determined that an existing dam is in a safe condition, the owner is not required to comply with R12-15-1216 unless the Director determines that it is cost effective to upgrade the dam to comply with the requirements of R12-15-1216 at the time a major alteration or major repair is planned. In determining whether it is cost effective to upgrade a dam, the Director shall consider:
 1. The hazard potential classification of the dam;
 2. Whether the cost of the upgrade would exceed 25% of the total cost of the major alteration or major repair; and
 3. Whether there is a more cost effective alternative that would provide an equivalent increase in safety.
- C.** If the Director has determined that a dam is in an unsafe condition, the owner shall comply with the requirements in R12-15-1216. The owner is not required to comply with a requirement in this Article if the Director finds that, considering the site characteristics and the proposed design, the requirement is unduly burdensome or expensive and is not necessary to protect human life or property. The Director shall consider the size, hazard potential classification, physical site conditions, and applicability of a requirement to the dam. The Director shall state in writing the reason or reasons the owner is not required to comply with a requirement.
- D.** The owner shall ensure that installation of utilities beneath or through an existing dam is accomplished by open cuts or jacking and boring methods.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R.
2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1221. Emergency Action Plans

- A.** Each owner of a high or significant hazard potential dam shall prepare, maintain, and exercise a written emergency action

plan for immediate defensive action to prevent failure of the dam and minimize any threat to downstream development. The emergency action plan shall contain a:

1. Notification chart showing the priority for notification in an emergency situation. The owner shall notify local emergency response agencies, affected downstream populations, county emergency management agencies, and affected flood control districts;
 2. Description of the demand reservoir and scope of the emergency action plan;
 3. Delineation of potentially unsafe conditions, evaluation procedures, and triggering events that require the initiation of partial or full emergency notification procedures, based on the urgency of the situation;
 4. Delineation of areas of responsibility of the owner and other parties. The emergency action plan shall clearly identify individuals responsible for notifications and declaring an emergency;
 5. Specific notification procedure for each emergency situation anticipated;
 6. Description of emergency supplies and resources, equipment access to the site, and alternative means of communication. The emergency action plan shall also identify specific preparedness activities required, such as annual full or partial mock exercises and updates of the emergency action plan; and
 7. Map showing the area that would be subject to flooding due to spillway flows and dam failures.
- B.** The owner shall use the Director's model emergency action plan, which is available at no cost, or an equivalent model, for guidance in preparing the emergency action plan.
- C.** The owner shall submit a copy of the proposed emergency action plan for review by the Arizona Division of Emergency Management and all local emergency coordinators involved in the plan. The owner shall incorporate appropriate recommendations generated by the reviews and submit the revised emergency action plan to the Department.
- D.** The owner shall review and update the emergency action plan annually or more frequently to incorporate changes such as new personnel, changing roles of emergency agencies, emergency response resources, conditions of the dam, and information learned from mock exercises. The owner shall send updated portions of the plan to persons and agencies holding copies of the plan within 15 days after preparation of an update.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1222. Right of Review

- A.** An applicant or owner aggrieved by a decision of the Director regarding the determination of hazard classification, jurisdictional status, or the Director's application of this Article may seek review of an appealable agency action under A.R.S. Title 41, Chapter 6, Article 10.
- B.** An applicant or owner aggrieved by a decision of the Director that requires the exercise of professional engineering judgment or discretion or the assessment of risk to human life or property, such as the adequacy of an applicant's project documentation, dam design, safe storage level, requirements for existing dams, or maintenance, may seek review by a board of review under A.R.S. §§ 45-1210 and 45-1211.
- C.** The following actions are not subject to review:
1. Emergency measures taken under A.R.S. §§ 45-1212 or 45-1221.

2. Agency decisions made under A.R.S. §§ 41-1009(E) or (F).
3. Agency actions made exempt from review by law.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1223. Enforcement Authority

- A.** The Department may exercise its discretion to take action necessary to prevent danger to human life or property. The Director may take any legal action that is proper and necessary for the enforcement of this Chapter.
- B.** If the Director has cause to believe that a dam is unsafe or a person is violating or has violated a provision of this Article or A.R.S. Title 45, Chapter 6, Article 1, the Director may issue a notice directing the owner to remedy the safety deficiency or correct the violation. The owner may appeal a notice issued under this subsection as an appealable agency action in accordance with A.R.S. Title 41, Chapter 6, Article 10. If the owner does not appeal within 30 days after the date on the notice, the notice becomes final and may be incorporated as a condition of any license based on the duration of the requirement.
- C.** If the Director has cause to believe that a dam is unsafe or a person is violating or has violated a provision of this Article or A.R.S. Title 45, Chapter 6, Article 1, the Director may proceed under A.R.S. § 45-1221 to initiate a contested case under A.R.S. Title 41, Chapter 6, Article 10 by requesting an administrative hearing.
- D.** Following a written decision by an administrative law judge, the Director shall issue a decision and order accepting, rejecting, or modifying the administrative law judge's decision. Upon expiration of time to appeal, the decision and order becomes final and may be incorporated as a condition of any license based on the duration of the requirement.
- E.** If the Director has cause to believe that a dam is unsafe or a person is violating or has violated a provision of this Article or A.R.S. Title 45, Chapter 6, Article 1 the Director may commence an action in a court of appropriate jurisdiction if:
1. The violation is an emergency requiring appropriate steps to be taken without delay; or
 2. The Director has cause to believe that use of the administrative procedure would be ineffective or that delay would ensue and a deterioration in the safety of the dam would occur.
- F.** If the Director commences an action it shall be brought in a court of appropriate jurisdiction in which:
1. The cause or some part of the cause arose; or
 2. The owner or person complained of has his or her place of business; or
 3. The owner or person complained of resides.
- G.** A person determined to be in violation of this Article; A.R.S. Title 45, Chapter 6; a license; or order may be assessed a civil penalty not exceeding \$1,000 per day of violation. The Director may offer evidence relating to the amount of the penalty in accordance with A.R.S. § 45-1222.
- H.** A violation of A.R.S. Title 45, Chapter 6, Article 1 regarding Supervision of Dams, Reservoirs, and Projects is a class 2 misdemeanor, in accordance with A.R.S. § 45-1216.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1224. Emergency Procedures

- A.** The owner of a dam shall immediately notify the Department and responsible authorities in adjacent and downstream communities, including emergency management authorities, of a

condition that may threaten the safety of the dam. The owner shall take necessary actions to protect human life and property, including action required under an emergency action plan or order issued under this Article.

1. A condition that may threaten the safety of a dam includes:
 - a. Sliding of upstream or downstream slopes or abutments contiguous to the dam;
 - b. Sudden subsidence of the top of the dam;
 - c. Longitudinal or transverse cracking of the top of the dam;
 - d. Unusual release of water from the downstream slope or face of the dam;
 - e. Other unusual conditions at the downstream slope of the dam;
 - f. Significant landslides in the reservoir area;
 - g. Increasing volume of seepage;
 - h. Cloudy seepage or recent deposits of soil at seepage exit points;
 - i. Sudden cracking or displacement of concrete in a concrete or masonry dam spillway or outlet works;
 - j. Loss of freeboard or dam cross section due to storm wave erosion;
 - k. Flood waters overtopping an embankment dam; or
 - l. Spillway backcutting that threatens evacuation of the reservoir.
 2. In case of an emergency, the owner shall telephone the Arizona Department of Public Safety's emergency numbers at (800) 411-2336 or (602) 223-2000.
- B.** The Director shall issue an emergency approval to repair, alter, or remove an existing dam if the Director finds that immediate remedial action is necessary to alleviate an imminent threat to human life or property.
1. The emergency approval shall be provided in writing on a form developed for this purpose.
 2. The emergency approval may contain conditions the Director determines are appropriate to protect human life or property.
 3. The emergency approval is effective immediately for 30 days after notice is issued unless extended in writing by the Director. The Director shall also send notice to the county flood control district of the county in which the dam is located, all municipalities within 5 miles downstream of the dam, and any additional persons identified in the emergency action plan.
 4. The Director may institute legal or administrative proceedings that the Director deems appropriate for violations of the emergency approval or conditions of the emergency approval.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1225. Emergency Repairs

- A.** The Director shall use monies from the dam repair fund, established under A.R.S. § 45-1212.01 to employ any remedial measure necessary to protect human life and property resulting from a condition that threatens the safety of a dam if the dam owner is unable or unwilling to take action and there is not sufficient time to issue and enforce an order.
- B.** The deputy director may authorize an expenditure not to exceed \$10,000 from the dam repair fund for remedial measures under A.R.S. § 45-1212. The expenditure of any additional funds shall be approved by the Director.
- C.** The Director shall hold a lien against all property of the owner in accordance with A.R.S. § 45-1212.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).

R12-15-1226. Non-Emergency Repairs; Loans and Grants

- A.** If the Director determines that a dam represents a threat to human life and property but is not in an emergency condition, the Director may use the dam repair fund, established under A.R.S. § 45-1212.01, as prescribed in this Article to defray the costs of repair.
- B.** Monies from the dam repair fund may be used for loans and grants to owners as provided in A.R.S. §§ 45-1218 and 45-1219.
- C.** To qualify for a loan or grant from the dam repair fund, a dam shall be classified as unsafe by the Director.
- D.** The Director may authorize grant funds for all or part of the cost of engineering studies or construction needed to mitigate the threat to human life and property created by a dam.
1. The Director and the grantee shall execute a financial assistance agreement that includes terms of financial assistance, the work progress, and payment schedule.
 2. The Director shall disburse grant funds in accordance with the financial assistance agreement.
 3. The Director shall establish a priority ranking for grants based on factors including the potential for failure of a dam, the number of lives at risk, and the capability of the owner to pay a portion of the costs.
- E.** The Director may loan funds for engineering studies or for all or part of construction as prescribed in A.R.S. § 45-1218.
1. The Director and the dam owner shall execute a loan repayment agreement. The loan repayment agreement shall be delivered to and held by the Department.
 2. The Director shall establish a priority ranking for loans based on factors including the potential for failure of a dam, the number of human lives at risk, and the capability of the owner to pay a portion of the costs.

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2558, effective June 12, 2000 (Supp. 00-2).